## Academic Calendar 2019-2020

| Fall Semester 2019 |  |
| :--- | :--- |
| Classes Begin | Wednesday, August 21 |
| Last Day to Register/Add Classes | Tuesday, August 27 |
| Last Day to Drop without a W | Tuesday, August 27 |
| Labor Day, No Classes | Monday, September 2 |
| Fall Break, No Classes | Saturday-Tuesday, October 5-8 |
| Last Day to Drop/Withdraw with W | Friday, November 8 |
| Thanksgiving Break, No Classes | Wednesday-Sunday, November 27 - December 1 |
| Reading/Study Day, No Classes | Thursday, December 5 |
| Final Exams | Friday-Thursday, December 6-12 |
| Last Day of Term | Thursday, December 12 |
|  |  |
| Spring Semester 2020 | Monday, May 18 - Friday, June 19 |
| Classes Begin | Monday, January 13 June 22 - Friday, July 24 |
| Last Day to Register/Add Classes | Friday, January 17 |
| Last Day to Drop without a W | Friday, January 17 |
| Martin Luther King, Jr. Day, No Classes | Monday, January 20 |
| Spring Break, No Classes | Saturday-Sunday, March 7-15 |
| Easter Break, No Classes | Thursday-Sunday, April 9-12 |
| Last Day to Drop/Withdraw with W | Thursday, April 13 |
| Reading/Study Day, No Classes April 30 |  |
| Final Exams | Last Day of Term |
| Commencement | Tharday, May 9 |
|  |  |

# The University 

## History

The University of Evansville, an independent, United Methodist Church-affiliated university, holds a strong position in character and quality among institutions of higher education throughout the nation. With five colleges and schools, including the Harlaxton CollegeinEngland, theUniversity providesoutstandingeducational opportunitiesintheliberalartsandsciencesaswellasinselected professions. The University offers more than 80academic areas of study and a full range of degree programs, including bachelor's, master's, and doctoral degrees, certification programs, and adult education classes. Approximately 2,700 full-time and part-time students in creditprogramsfrom42statesand 55 countriesstudyonits beautiful 75-acre campus.

Founded in 1854 as Moores Hill Male and Female Collegiate Institute in southeastern Indiana, the school was relocated to Evansville in 1919and renamed EvansvilleCollege.In 1967, after continued growth and organizational restructuring, the name was changed to the University of Evansville with the approval of the Indiana General Assembly.

Metropolitan Evansville is located on the banks of the Ohio River in southwestern Indiana. The city of about 122,000 residents serves as the cultural, industrial, and retail center for the Tri-State region encompassingsouthernIllinois, westernKentucky, andsouthernIndiana. Evansville is a comfortable drive from Cincinnati, Indianapolis, Louisville, Nashville, and St. Louis.

## Mission And Core Values

## Mission Statement

To empower each student to think critically, act bravely, serve responsibly, and live meaningfully in a changing world.

## Core Values

Integrity
Wepromoteacademicand personalintegritytoestablishaculture oftrust.Academicintegritybeginswithallstudents pledgingtoabide by our honor code, and extends to faculty, staff and administration adhering to our code of conduct. It culminates in an expectation of professionalism,transparency, andrespectinallinteractions.Personal integrityincludes practicinginformed,ethicaldecision-making, and respecting the ideas, rights, boundaries, and beliefs of others. Each member of our community is accountable and prepared to act as a responsible citizen of the world.

## Innovation

We recognize the value of interdisciplinary teamwork, creative problemsolving, globalimmersion, andlearningexperiencesathome andabroad. Werecognizethevalue oflearning fromfailure. Wehave the freedom, flexibility, and motivation to create experiences that help our students think critically and act bravely. Each member of our community is challenged to discover novel solutions to modern problems and to become a catalyst for progress.

## Intellectual Curiosity

We strive to developlifelong learners. We introduce students to a variety ofideasthatsharpenexisting interestsandawakenlatentones. Wechallengestudentsto stretchtheirminds, whilesupportingthem withstrongfacultyengagement.Research,experientiallearning, and communityoutreachfosterintellectualcuriositywhileexposuretonew
ideas andtechnologiesbroadensourstudents'view oftheworldand what might be possible.

Inclusive Community
Wevalueopennessandcollaboration, andrecognizethatinclusion leads to personal growth. Our commitment to actively fostering a diverse rangeofculturesand perspectives reflectsthecharacteristics required to thrive in an increasingly global society. The university demonstrates and benefits from inclusion by welcoming all.

## Education for the Whole Person

We cultivate intellectual, moral, social, physical, emotional and spiritual wellnessthrough engagement and discovery. Wevalue the liberal arts, sciences, and professional programs as paths to intellectual and personal growth, and we encourage the integration of knowledge across disciplinary lines. We promote engagement in organizations, programs, andthecommunityasessentialtopersonal development.Weequipindividualstoexaminetheirworld, articulate theirvalues, and developthecharacterneededtolivehealthylives of meaning and purpose.

## Vision Statement

The University of Evansville-a leading private university in the Mid-west-isrecognizednationallyfordevelopingstudents'personaland professionalcompetencies,cultivatingcriticalandcreativethinkers, and producingethical, global citizensequippedtothriveina world of complexityandchange.Weaccomplishthisbyattractingandretaining talented and motivated students who succeed within a diverse, supportive, and sustainable environment.

## Accreditation

The University of Evansville is accredited by the Higher Learning Commission.InformationabouttheUniversity ofEvansville'saccreditation can be obtained through the Higher Learning Commission; 230 South LaSalle Street, Suite 7-500; Chicago, Illinois, 60604-1411; hlcommission.org; 800-621-7440.

The University of Evansville is approved by the University Senate of The United Methodist Church. Additional accrediting bodies include:Associationto AdvanceCollegiateSchoolsofBusinessInternational, National Association of Schools of Music, Accreditation Commission for Education in Nursing, Council for the Accreditation ofEducatorPreparation,IndianaDepartmentofEducation,Commissionon Accreditation of Athletic TrainingEducation,Commissionon Accreditation in Physical Therapy Education, and The Accreditation Review Commission on Education for the Physician Assistant. The civil,computer,electrical,andmechanicalengineering programsare accredited by the Engineering Accreditation Commission of ABET, www.abet.org. The computer science program is accredited by the Computing Accreditation Commission of ABET, www.abet.org.

ApprovedbytheNationalStrengthandConditioningAssociation, American Chemical Society, and the American Music Therapy Association, The University of Evansville is also a member of the National Association of Independent Colleges and Universities, Association of Schools and Colleges of The United Methodist Church, and the Association for Continuing Higher Education.

Becauseofaccreditationbyormembershipintheseorganizations, qualified graduatesareregularlyaccepted withfullcreditbygraduate and professional schools throughout the nation.

## The University

## Educational Objectives

The following educational objectives reflect the mission and character of the University of Evansville as well as national-ly-recognized best practices for a liberal education that equips students to compete and thrive in an increasingly complex global society. Recognizing that a well-rounded education has important curricular and co-curricular components, the University envisions integrative learning that emphasizes connections within and between general education and the major course of study and that brings together diverse experiences from campus, community, and the larger world.

Graduates of the University of Evansville will:
Acquire broad foundational knowledge of the liberal arts and sciences through the general education program, including:

- Appreciation for creativity and artistic expression
- Knowledge of historical and cultural developments
- Insight into human behavior and social relations
- Understanding of the physical and natural world
- Cultivation of an international perspective

Develop and improve intellectual and practical skills, including:

- Written and oral communication
- Critical and creative thinking
- Quantitative literacy
- Problem-solving and research
- Collaboration and leadership

Understand, develop, and demonstrate personal and social responsibility, including:

- International citizenship
- Intercultural competence and appreciation of diversity
- Ethical reasoning and behavior
- Civic engagement, local and global
- Commitment to mental, physical, and spiritual well-being
- Commitment to lifelong learning
- Gain a depth of knowledge and competency in one or more disciplines of their choice

A University of Evansville education goes well beyond these objectives, which are intended merely to establish the common core of knowledge and skills upon which our students will build as they address contemporary and enduring questions, pursue personal growth, and prepare to engage the world as informed, ethical, and productive citizens.

## Admission

## Freshman Applicants

TheUniversityofEvansvilleseeksmotivatedstudentswhodesirean interactivelearningexperiencewithinaclose-knitacademicandsocial community. In high school, students should follow a college preparatory program minimally including four years of English, three social sciences,threelabsciences,threemathematicscourses,andstronglyrecommend two years of foreign language. Grade point average (GPA), courseselection,standardizedtestscores,classrank, writing sample, andcounselorevaluationsareusedtodetermineastudent'sadmissibility. Extracurricular activities are also considered.

Students should submit the following information in applying to the University of Evansville: a completed application with official high school transcript and SAT or ACT scores. An essay and a coun-selorrecommendationformarerecommended.Atestoptionalpathway is available for students who wish to apply without submitting SAT or ACT scores. Students selecting test optional will be required to submit an essay. Early Action deadline is November 1, with notificationby November 15. Applicationsareacceptedonarolling basis afterNovember 1 asspace is available.Acceptedstudentsdecidingto enrollattheUniversityshouldsendanonrefundable $\$ 300$ depositby May 1 to reserve their place in the freshman class.

## Transfer Students

Transferstudentsaredegree-seekingstudentswhohavegraduated from high school or received their GED and have been enrolled at a regionallyaccreditedcollegeoruniversityatanytimesincegraduation or earning the GED. Courses with a grade of C- or higher will be consideredfortransfercredittotheUniversityofEvansville. Interested transferstudentsshouldsubmitatransferapplicationandofficialtran-scriptsfromallpost-secondaryschoolsattended.Studentswithfewer than 24 credithoursmustalsosubmitan official high schooltranscript and standardized test scores. Transfer students may also submit a personal statement.

Transfer students are admitted on a rolling basis. Notification of admissionstatuswillbesentafteracompletedapplicationisreceived, reviewed, and processed. Transferstudents mustsend a nonrefundable $\$ 150$ deposit when they decide to enroll at the University.

## Re-entry Admission

Students who have formerly been enrolled at the University of Evansville as degree-seeking and who wish to re-enroll following a semester or more of absence need to complete an application for re-entryadmission. Ifthe student has been enrolled elsewhere since leaving UE, transcripts from themostrecentlyattended universityare needed as well.

Re-entry students are admitted on a rolling basis. Notification of admission status will be sent once the application has been fully reviewedandprocessed.Re-entrystudentsmustsendanon-refundable $\$ 100$ deposit when they decide to re-enroll at the University.

For questions concerning graduation under a particular catalog, please refer to the section titled Academic Policies and Procedures.

## Part-Time Students

Students who wish totakeclassestoward a degree, whetherthey arefull-timeor part-time, mustmeetregularadmissionstandardsas stated by the Office of Admission.

Formoreinformationandapplicationmaterials,studentsshould contact:

Office of Admission<br>University of Evansville<br>1800 Lincoln Avenue, Evansville, Indiana 47722<br>1-833-BeAnAce or 1-833-232-6223<br>admission@evansville.edu or www.evansville.edu

## International Students

The University of Evansville welcomes international students to our campus. International students should submit an international student application online, official transcripts of all high school and university work, official TOEFL or IELTS scores, and proof of financialsupportforthefirstyearofcollegeexpenses.Undergraduate applicants must score at least 61 on the Internet-based TOEFL or 5.5 on the IELTS test unless otherwise specified by the degree program. For more information, contact:

Office of Admission
University of Evansville
1800 Lincoln Avenue, Evansville, Indiana 47722
001-812-488-2434
international@evansville.edu
www.evansville.edu
All students whose native language is not English must take the University's writing skills test as a part of registration for the first term. TestresultsdetermineplacementinappropriateEnglishcredit-bearing courses.

## Special Students

Students not wishing to pursue a degree may take courses at the Universityas"specialstudents."Specialstudentsaregrantedpermission to earn up to 24 credit hours at UE. After earning the first 24 hours of credit, an application for admission must be submitted or a special studentextensionmustberequested. Specialstudentsaredefinedas the following:

- Visiting/Transient Students are currently enrolled at another accredited college or university who wish to take courses at UE but plan to graduate from their home institution
- Concurrent Students are currently enrolled in high school or are homeschooled and wish to take courses at UE
- College Graduate Students have a college degree but need additional undergraduate credit to earn special licensing or to prepare for graduate school
- PersonalEnrichment/Non-DegreeSeekingStudentshavegraduated from high school or earned their GED, regardless of age, who wish to take courses for personal enrichment
Admissioncriteriaaredifferentforeach specialstudentcategory.
For more information and a special student application, contact:
Office of the Registrar
1800 Lincoln Avenue, Evansville, Indiana 47722
812-488-2600
registrar@evansville.edu
www.evansville.edu


## UE Guarantee

## New Students

Beginning with the incoming class of Fall 2016, new UE students will be covered by the UE Guarantee. The Guarantee will rely on each student's commitment to follow a list of practical guidelines in exchange for the University's assurance that required courses are available,personalacademicplansaredeveloped,andpersonalcounseling is made available. To qualify for the Guarantee, students must pursue a course of study that is intended for four-year completion*, haveappropriatehighschoolandEnglishlanguageproficiencypreparation, and follow the guidelines below:

- Beafull-time,degree-seekingfreshmanstudentwhofollowsthe outlined course of study plan for graduation published by the academicdepartmentandmaintainsthatprogram'sacademic progression and requirements.
- Successfullycompleteall prerequisiteandrequiredcoursesand GPA requirements each year to move forward in a declared major.
- Maintain full-time, consecutive enrollment for all four years in a course of study approved by the advisor.
- Maintain satisfactoryacademic progressasdefined bytheUniversity registrar on page 45.
- Receive noacademic orjudicial sanctions as defined intheStudent Handbook that would delay graduation.
- Some professional programs* and some experiences (such as co-ops,ChangeLab,andcertainstudyabroadtravel)mayrequire more than fouryears to complete. For such programs, if the prescribedacademic planisfollowedandastudentfailstograduate on time, UE will provide the hour or hours needed to complete thedegreenottoexceedoneyear(roomandboardnotincluded).
- Changingmajorsafterthefirstsemesterto/fromprogramslikenursing, engineering, or music can prevent graduating in fouryears as theseprogramscurriculumbeginthefirstsemesterofthefirstyear.
*Programsrequiringmorethan4yearsinclude:musictherapy,music education, clinicallaboratoryscience,andengineering.Morethanone major,ormultipleminorsmayalsoextendrequiredtimeforadegree.


## Current Students

The UE Guarantee applies to incoming freshmen who matriculate at the University of Evansville beginning in Fall 2016. However, sincethe Guarantee is based onthequality of our existing programs, all current enrolled students benefit directly from the institutional resources the Guarantee ensures.

- Smallclass sizes enable all students' one-on-oneaccess to high quality faculty engagement and mentorship.
- Internships and experiential education opportunities are an integral part of a UE education that helpsourgraduates be successful. All students and alumni have full access to UE's Center for Career Development resources now and after graduation.
- All full-time degree-seeking freshmen entering since the fall of 2015, except those receiving financial support from a non-U.S. governmental entity, received institutional financial aid.
- All UE students have the opportunity to study abroad. Additionally, astudent'sfinancialaid packageappliestostudyabroad at Harlaxton College, which makes the Harlaxton program particularly affordable.
If you are a current student and have questions about the UE Guarantee, please contact the Office of the Registrar at 812-4882600 or registrar@evansville.edu.


## Financial Aid

The University of Evansville is eager to see that students have the opportunity to obtain an education that will enable them to maximizetheirabilities andtobeofthegreatestservicetosociety.Itstrives to adhere to a consistent and equitable approach in the awarding of student financial aid. Many students rely on financial aid to help with college costs, and over 90 percent of the University's full-time students receive some type of financial assistance.

The University demonstrates its commitment to making high qualityeducationaffordablebyofferingseveraltypes ofmeritscholarships and awards as well as need-based assistance in the form of grants,loans,andon-campusemployment.Studentsoftenhavesome combination of the four types of aid. Students are free to accept or reject any part of the financial aid offered. First-time applicants to UEareconsideredforscholarshipsandmeritawardswhentheyapply foradmission.Theseawardsaremadepossiblethroughthegenerous gifts of donors.

Although the University is eager to help students, it believes that the principal responsibility for financing an education lies with students andtheirfamilies who areexpected to contribute as much as is reasonablypossibletowardeducationcosts.TheUniversity'sfinancial aid program exists primarily to help students who, without such aid, would be unable to attend UE.

## Needs Analysis and Deadlines

The University adheres to the principles of financial aid administration established by the National Association of Student Financial AidAdministrators.Tohelpjudgestudentneedanddistributefinancial aidfairly, the University asksthatstudents and parents complete the Free Application for Federal Student Aid (FAFSA) on an annual basis. Submitting this form to the federal processor so that it is received by April 15th is mandatory to apply for assistance from the State of Indiana and is highly recommended for all students. Eligibility for financial aid administered by the Office of Student Financial Services is based on students' enrollment.

## Establishing Financial Aid Eligibility

Students must first be admitted to the University of Evansville before any type offinancial aid can be offered or processed. International students must apply through the UE Office of International Admission and are eligible only for UE scholarships and UE workstudy.

In order to be eligible for federal and state financial aid, a student must:

- Have a high school diploma or GED
- Be a US citizen or eligible non-citizen
- Have a valid Social Security number
- Comply with Selective Service registration, if male
- Notbeindefaultonanyfederal studentloanorowea refundon a federal student grant
Continuing eligibility for federal and state financial aid requires thatstudentsfiletheFAFSA annually, maintainsatisfactoryacademic progress, notbeconvictedunderfederalorstatelawofthesaleorpossession ofdrugs while receiving federal student aid, and continue to bedegree-seekingstudentsenrolledinappropriateaid-eligiblecredits.

Incoming freshmen will be provided their financial aid notification beginning in December. Returning students will be provided access to their award notification in June.

## UE Merit-based Scholarships

Merit-based scholarships are awarded only at the time of acceptance to UE. The types of scholarships offered, standards for selection, amounts, and renewal criteria may change with each new academic year. Awards are administered throughout the student's UE career according to the policy in place at the time the award is offered.UniversityofEvansvillemerit-basedscholarshipsareavailable forfull-timeenrollmentduringfallorspringsemesters.Detailsabout renewingUEmerit-basedscholarshipscanbefoundintheUEFinancialAidAwardGuideavailableonlineathttps://www.evansville.edu/ student-financial-services/policies.cfm.

Neither University of Evansville merit-based scholarships nor UE need-basedgrantsareavailableforstudentsinprogramsadministered by the Center for Advancement of Learning, RN to BSN, or Transition to Teaching; however, need-based aid from federal and State of Indiana sources may be available.

## Need-based Financial Aid

The University of Evansville assesses eligibility for all forms of need-based financial aid through the Free Application for Federal Student Aid (FAFSA). Need-based aid may come from federal, state, and University sources, and may include grants (gift assistance that is notrepaid), studentloans(repaid bythestudentaftercollege), and federal work-study (a job on campus).

We encourage all UE students to file the FAFSA annually beginning October 1st each year for the next academic year. Indiana residents must file by April 15th each year to be considered for state grants.StudentsshouldfilenolaterthanMay 1sttoensuremaximum consideration for all forms of need-based aid for the next academic year.Eachtypeofneed-basedaidhasspecificrulesthatgovernitsuse, and details are offered in the UE Financial Aid Award Guide.

## Veterans Benefits

Information on all veteran educational benefits is available from the Department of Veterans Affairs online at www.benefits.va.gov. CampusadvisementofveteransregardingVAeducationalbenefitsis conducted through the Office of Student Financial Services.

## Duration

Financial aid from the University and/or state resources for fulltime students is normally available for eight semesters only or when requirementsforthefirstbachelor'sdegreehavebeenmet, whichever comes first. However, students may apply for the continuation of Universityneed-basedaidforafifthyearifextenuatingcircumstances have precluded the student from obtaining a degree in four years. Federal Pell Grant and Federal Direct Loans may be available for a fifthyearbased on needas demonstratedontheFAFSA.UEstudents enrolled in programs designed to last longer than four years may be eligiblefor institutional aid for the standard length oftheir program.

## Satisfactory Academic Progress Policy

The United States Department of Education (Higher Education Actof 1965, as amended)requiresthatstudentsmaintainsatisfactory progresstowardcompletingtheirdegreeinordertoreceivefinancial aid. The Office of Student Financial Services is required to check threestandards:quantitative(paceofprogression), qualitative(GPA), and maximum time frame for receiving aid.

Thesestandards,knownasSatisfactoryAcademicProgress(SAP),
applytoastudent'sentiredegreeprogram,includingsemesters(fall, spring, and summer) in which financial aid was not applied for or disbursed. SAP governs eligibility for students to establish or maintain aid eligibility for all federal, state, and institutional financial aid programs including grants, scholarships, student and parent loans, and work-study. Many private loans also require the student to be meeting SAP.

The UE Office of Student Financial Services reviews all three standards of Satisfactory Academic Progress at the end of each semester (fall, spring, and summer) for all students using financial aid. All summer terms combine to create one summer semester for financial aid purposes.

## Quantitative Standards (Pace of Progression)

Students mustsuccessfully completea minimum of 67 percent of all credit hours attempted. After grades are posted each semester, a student'scumulativecredithourssuccessfullycompleted(earned) will bedividedbythecumulativecredithoursattemptedtodeterminethe completion rate.

Completed (earned) credits: Successfully completed credits include grades of $A, B, C$, or $D$ (including plus or minus) and credits taken pass/fail, in which a P was earned.Unsuccessful grades consist of F, W, I, classes taken for audit, or any other grade that does not result in completed credits. Credits earned by examination will be considered completed credits. Note:A grade ofD is not considereda passinggradeforgraduateprogramsandisnotcountedascompleted credit.

Attempted credits: All credit hours for which a student registers at UE, those transfer credits that count toward the UE degree, and credits earned by examination are included in attempted credits. Grades of I orW will count as hours attempted, but not completed. If incompletesarelatercompleted, they willbereflected when progress is again checked, or sooner, at the student's request.

Transfer Credits: Transfer credits that apply to a student's UE degree are included in both the credits attempted and the credits earnedwhencalculatingthecompletionpercentage.Creditsreceived for remedial courses or for courses that are not applicable to the student'sUEdegreearenotincludedineithercreditsattemptedorearned.

Repeated Courses: Courses that are retaken to improve a grade arecountedinattemptedhourseachtimethecourseistaken,butonly oncetowardthecredithoursearnedinthecompletionrate.Students may retake a class for which they have previously received a grade of "F" as many times as it takes to successfully complete the class. However, students may only repeat a course one time in which they have receivedapassinggrade.Afteroneallowabletime,thestudentcannot use federal assistance for future repeats.

Part-time Students: Cumulative GPA requirements are the same as for full-time students. The number of semesters required to completetheprogram willdependonthehours registered.Students mustsuccessfullycompletethemajority ofthecredithoursattempted eachsemesterandmaintaina67 percentcumulativecompletion rate.

Second Degree Students: Officially accepted credits that apply tothedegreeprogram willcounttowardbothcredithoursattempted and credit hours earned.

## Qualitative Standards (GPA)

Undergraduate students admitted to UE as freshman must have earned a minimum cumulative GPA of 2.0 by the end of their second academicyear(fourthregularsemester) andeachsemesterthereafter. Before theend of the fourth semester, these students must have the minimum cumulative GPA as shown below:

## Credit Hours Earned GPA <br> Fewer than 301.6 <br> 30-59.99 1.9

All other students must maintain a minimum cumulative GPA of 2.0 at the end of each semester.

## Maximum Time Frame for Eligibility

Federal Aid Standards: Federal regulations govern the maximum length of time a student may receive federal aid. This time frame is defined as $150 \%$ of the scheduled length of the program. For example, students pursuing a bachelor's degree in an academic program requiring 120 credit hours may attempt up to 180 credit hours ( $150 \%$ of 120 is 180 hours). Students pursuing an associate degreerequiring 72 creditsmayattemptupto 108credithours(150\% of 72 is 108 hours). For transfer students, the number of transfer credit hours accepted at the point of admission to UE will be used to calculate the student's remaining eligibility for the $150 \%$ maximum time frame calculation. Second undergraduate degree students are willhavethepreviousdegree'sacceptedcredithoursappliedtoward the student's current degree and used in the $150 \%$ maximum time frame calculation.

## Financial Aid Academic Progress Status

Financial Aid Warning: Students will be sent a warning if they fail to meet either the completion rate, minimum cumulative GPA standard as outlined, or are approaching their program's maximum time frame. Students will be placed on warning for one semester during which they must come into compliance with the standard. Students not meetingSAP at the end ofthe warning semester will be placed on Financial Aid Suspension.

Financial Aid Suspension: Students who fail to meet the standardsattheend oftheir warning semester willbeineligibleforfinancialaidbeginningwiththenextsemesterofattendance.(Seeappeals to regain eligibility.)

Students receiving grades of $F$ or $D$ (graduate programs only) in allcoursesattemptedinanysemesterwill beautomatically ineligible forfinancialaidregardlessofwhetherthestudenthaspreviouslybeen placed on financial aid warning.

Studentswhopreregisterforasubsequentsemesterbeforegrades are evaluated and who use financial aid to defer tuition and fees are responsibleforthesemester'sbalanceiftheydonotmaintainsatisfactoryacademic progressandhavebeendisqualifiedfromfinancialaid once grades are posted and reviewed.

A student who is disqualified from financial aid more than one timeforfailuretomeetthesestandardsmustmeetwithafinancialaid counselorto discuss plansforre-establishingfinancial aid eligibility. Unlessthereareextenuatingcircumstances,astudentinthiscategory should expecttoenrollforat least 12 semestercredits withoutfinancial aid at UE and successfully pass all courses with a minimum of a 2.0 GPA to be reconsidered for financial aid.

Students are responsible for maintaining awareness of their SAP statusforaidrenewalwhetherornottheyreceivetheofficial notifications. The Office of Student Financial Services is not responsible for addresschangesthatarenotreportedorforproblemswithpostalmail oremail delivery.Students may view their SAP status in Financial Aid Self Service at any time.

Correcting Academic Deficiencies: It is important to remember that grade deficiencies can only be corrected at UE, but credits to
correctadeficiencyincredithoursearnedcanbetakenelsewhereand transferred to UE through arrangement with the Office of Academic Advising. Students may request a review of their progress when a grade is changed, regardless of when that change occurs.

Appeals to regain eligibility: A student who fails to meet these standards and has lost eligibility for financial aid may appeal this decision. Appeals must be in writing and must be accompanied by appropriate supporting documents. In the appeal, the student must explain why he or she was not making progress and what has changedsothatheorshewillbeginmaking progress.Appealsshould be submitted to the Office of Financial Aid at least three (3) weeks beforethebeginningofthestudent's nextsemesterofattendanceto allow time for processing.

Appeals will be approved or denied in writing via email. The student is limited to two appeals.

Reasonsthatmaybeacceptableforappealare:1)seriousillnessor accidentaffecting the student;2)death, accident,orseriousillnessin the student's immediate family; 3) change in academic program; 4) or other circumstances.

Ifapproved, thestudentwill be placed on Financial Aid Probation for one semester and aid will be granted. If the student cannot meet SAP by theend of the probationary semester, the studentmustcomplete and submit to the Office of Student Financial Services a SAP academicplanthatshowshowandwhenthestudentwillbemeeting SAP.

Ifdenied, thestudentmaychoosetoenrollwithoutusingfinancial aid in an effort to repair the SAP deficiencies. Students may request a review of their record following any semester. If the SAP standards aremetat the time ofreview, financial aid eligibility may be regained for subsequent semesters of enrollment that year.

## Financial Aid and On-Campus <br> \section*{Residency Requirements}

Most students are required to live in University-approved housing when they enter UE. For most students, the full renewal of UE financial aid (scholarships or grants) requires continued residency in UE-approved housing, even after satisfying their on-campus residencyrequirement.Theresidencyrequirementsandassociatedaid policies differ for freshmen and transfers.

Freshmen: Freshmen* must live in UE-approved housing for two years, or the equivalent of four semesters. The Office of Residence Life may grant an exemption if the student meets one of the following criteria:
1.The student's local residence is with parents or legal guardians in Vanderburgh or contiguous counties;
2. The student has attained the age of 21 prior to the start of the academic year;
3. The student is married and/or lives with a dependent.
*Residencyrequirementalsoappliestofreshmentransfers(those enteringUEinJanuaryafteronesemesteratanotherinstitution).InternationalstudentswhohaveparticipatedintheIntensiveEnglishProgram may count their semester(s) in residence toward this requirement.

Transfer Students: Transfer students who have not attained 60+academiccredithoursbythestartoftheacademicyearmustlive in UE-approved housing when entering UE. These hours can be a combination of hours earned at previous institutions and UE hours (excluding bridge, early-college, dual-credit, and advanced placement credit). Students with fewer than 60 hours may also request an exemption from the Office of Residence Life if they meet one of the following criteria:

1. The student's local residence is with parents, legal guardians,
or immediate family members who are over the age of 21. Local residence must be in Vanderburgh or contiguous counties;
2. The student has attained the age of 21 prior to the start of the academic year;
3. The student is married and/or must live with a dependent.

Office of Residence Life: Information and details regarding housing and meal plans are found at www.evansville.edu/residencelife.

Financial Aid Reduction: Students who were required to live in UE housing when entering UE, and who choose to move off campus aftersatisfying the Office of Residence Life's residency requirement, will experience an annual reduction to their UE-funded financial aid of $\$ 4,500$ ( $\$ 2,250$ per semester). This reduction of aid will not apply tostudentswhohaveelectedtoliveoncampusbutlatermoveoffcampustoliveathomewith parents in approved counties ortolive witha spouse or dependent. Documentation may be required.

Regaining aid: Students who lost aid as a result of moving off-campus may regain the original value of their aid if they return to UE-approved housing.

Harlaxton and study abroad: Students attending Harlaxton College for a semester are considered to be living in University-approved housing and will NOT experience a reduction to their UE-funded financial aid. Students in UE-approved study abroad programswillnotexperienceareductionaslongasthestudyabroad experience provides a housing opportunity similar to UE.

## Summer Aid

Summer is a trailer to the academic year and financial aid eligibilityavailableforsummerenrollmentmayinclude:federalloans(Direct or PLUS), private student loans, federal grants (Pell or SEOG), state grants, TuitionRemission(employees anddependents), andstudent employment. Students must be enrolled for at least six credit hours to qualify for federal loans. Students enrolled for less than six credit hours may consider private loans. No University of Evansville gift assistanceisavailableforanysummerprogramsincludingon-campus summerclasses.Studentsmayworkoncampus(asjobsareavailable) in the summer regardless of enrollment status, but only students who have not graduated and who will be returning to campus the following year will be eligible to apply. The Summer Financial Aid application and summer employment information will be available in mid-March. The Office of Student Financial Services determines eligibility for all forms of aid based on enrollment and summer cost of attendance.

## For More Information

Detailed information about all forms of financial aid (federal, state, and institutional) is available in the Financial Aid Award Guide provided annually.

## University of Evansville Financial Information Privacy and Safeguarding Guidelines

## Background

Adequatelysecuringcustomerinformationisnotonlythelaw,but italsomakesgood businesssense.Aboveall, itisourethicalresponsibilitytosafeguardthis information whileitis inourpossession. When we show that we care aboutthe security of personal information, we increase the level of confidence in our institution. Poorly managed customer data can lead to identity theft. Identity theft occurs when someonestealsaconsumer'spersonalidentifyinginformationtoopen
new charge accounts, order merchandise, or borrow money.

## Information Collected and Stored

Asaneducationalinstitution,theUniversity of Evansvillecollects, retains, and uses non-public financial information about individual students, as allowedbylaw,to provideservices.Non-publicfinancial information is collected from sources such as:

- Applications and/or other forms
- Financial transactions (checks, credit cards, and ACH)
- Information about transactions with us, our affiliates, or others
- Information we receive from consumer reporting agencies
- Information from governmental agencies


## Information Shared

The University of Evansville may disclose non-public financial information about students with our business affiliates and other affiliated third parties under certain circumstances to provide services. Any non-public financial information sharing is conducted in strict adherence to applicable law. The University of Evansville will notdiscloseanynon-publicpersonalinformationtoanyoneexceptas permitted under law.

## Who Receives Information and Why

The University of Evansville does not disclose any non-public financial information about our students, or former students, to anyone, except as permitted by law. We may exchange such information with our affiliates and certain non-affiliated third parties (under limitedcircumstances) totheextentpermissible underlawtoservice accounts, reportto credit bureaus, provide loan services, or provide other financial services related activities.

## How Information is Protected

The University of Evansville understands that the protection
of non-public financial information is of the utmost importance. Providing for administrative, technical and physical safeguarding of students'privacyisourobligation.Werestrictemployeeaccesstocustomerinformationonlytothosewhohavealegitimatebusinessreason toknowsuchinformation, andweeducateouremployees aboutthe importance of confidentiality and customer privacy.

## Tuition and Fees for the Academic Year 2019-2020

| TUITION | SEMESTER | ANNUAL |
| :---: | :---: | :---: |
| Traditional Undergraduate Programs: |  |  |
| Full-time Undergraduate (12-18 credit hours) | \$18,150.00 | \$36,300.00 |
| Each Additional Hour | \$1020.00 per hour |  |
| Part-time Undergraduate (1-11 credit hours) | \$1020.00 per hour |  |
| Summer Sessions | \$550.00 per hour |  |
| Non-Traditional Undergraduate Programs: |  |  |
| RN to BSN | \$315.00 per hour |  |
| Transition to Teaching | \$315.00 per hour |  |
| Teaching (Associates to Bachelor's) | \$315.00 per hour |  |
| Organizational Leadership | \$315.00 per hour |  |
| University Studies | \$315.00 per hour |  |
| Each Additional Hour | \$315.00 per hour |  |
| Summer Sessions: regular program rate |  |  |
| Graduate Programs: |  |  |
| Doctor of Physical Therapy | \$19,000.00 | \$38,000.00 |
| Doctor of Physical Therapy - summer sessions | \$580.00 per hour |  |
| Master of Physician Assistant Science: by cohort schedule |  |  |
| Master of Science in Health Services Administration | \$525.00 per hour |  |
| Master of Science in Public Health | \$525.00 per hour |  |
| Master of Science in Athletic Training | \$525.00 per hour |  |
| Master of Science in Public Service Administration | \$525.00 per hour |  |
| Master of Science in Leadership | \$525.00 per hour |  |
| Summer Sessions (HSA, PH, AT, PSA, ML): regular program rate |  |  |
| HARLAXTON-TUITION/ROOM/BOARD |  |  |
| Comprehensive Fee (Tuition, Room and Board) | \$24,440.00 |  |
| Services Fee - Harlaxton (Transport, Technology, Health/Wellness) | \$1,130.00 |  |
| REGISTRATION AND/OR ACTIVITY FEES |  |  |
| Registration Fee (Excludes FT students in Fall/Spring) | \$50.00 per session |  |
| Student Activity Fee - Evansville and Harlaxton | \$163.00 | \$326.00 |
| Services Fee - Evansville | \$420.00 | \$840.00 |
| Technology Fee - (Excludes FT students in Fall/Spring) | \$100.00 | \$200.00 |
| Technology Fee - Summer Session and Winter Session | \$35.00 per session |  |


| HOUSING | SEMESTER | ANNUAL |
| :---: | :---: | :---: |
| Residence Halls (Double Occupancy/Standard) |  |  |
| Morton, Brentano, Hale, Moore, Schroeder and Powell | \$3,335.00 | \$6,670.00 |
| Jones Hall | \$4,605.00 | \$9,210.00 |
| Villages | \$3,740.00 | \$7,480.00 |
| Weinbach Apartments (Single Occupancy) | \$4,605.00 | \$9,210.00 |
| Lincoln Park Apartments (Single Occupancy) | \$4,705.00 | \$9,410.00 |
| Townhouses | \$4,705.00 | \$9,410.00 |
| MEALS |  |  |
| Residence Hall Occupants: |  |  |
| Anytime Dine Prime 7: unlimited meals/\$300 Ace Bucks | \$3,215.00 | \$6,430.00 |
| Anytime Dine Purple 7: unlimited meals/\$100 Ace Bucks | \$3,050.00 | \$6,100.00 |
| Anytime Dine Orange 5: unlimited weekday meals/\$175 Ace Bucks | \$2,955.00 | \$5,910.00 |
| Aces 12: 12 weekly meals + \$300 Ace Bucks | \$2,955.00 | \$5,910.00 |
| Seniors in Residence Halls, Villages, Townhouses and Commuters: |  |  |
| Aces 7: seven weekly meals + \$200 Ace Bucks | \$1,285.00 | \$2,570.00 |
| SPECIAL FEES |  |  |
| Applied Music | \$420 per credit |  |
| Practice Teaching - Administrative Fee | \$60 |  |
| Practice Teaching | \$32 per week |  |
| Prior Learning Credit | \$50 per hour |  |
| Bridge/Dual Credit Program | \$100 per course |  |
| Co-op | \$400 per period |  |
| Music Therapy Internship | \$400 |  |
| Late Registration | \$190 |  |
| Parking | \$50 per year |  |
| Credit by Exam | \$120 per credit |  |
| Tuition Exchange | \$250 per year |  |
| Course Audit Fee (no credits earned) | \$100 per credit |  |
| Nursing Course Fee - Harlaxton | \$450 |  |
| Senior Scholars/Age 62 and up, non-degree seeking students | \$125 per credit |  |
| Variable Section Fees: May apply with specific course registration. |  |  |
| Finance Charge: $1.5 \%$ per month calculated on month-end balance. |  |  |

## Institutional Charges and Financial Aid Refund Policy

All institutional financial aid will be refunded according to the institutional charges refund schedule shown below. In other words, all UE financial aid will be refunded according to the 100 percent, 80 percent, 60 percent, 40 percent, or 20 percent determination during the first four weeks. After four weeks, there are no refunds for such aid.

Institutional Charges: Tuition, on campus room and board, and thefollowing fees:activity, registration, services, appliedmusic, and any mandatory course related fees.

Non-Institutional Charges: All other fees and costs (special fees, books, insurance fees, off-campus living expenses, transportation expenses, and the like).

Theamountofinstitutionalchargesthatwillberefundedisdetermined as follows:

- UE classes begin on Wednesday in fall and Monday in spring. Students who withdraw on or before the first day will receive a 100 percent refund.
- Students who withdraw or leave within the first week of class (ThursdaythroughWednesdayinfallorTuesdaythroughMonday in spring) will receive an 80 percent refund.
- Studentswhowithdraworleavewithinthesecondweekofclass (next Thursday through Wednesday in fall or Tuesday through Monday in spring) will receive a 60 percent refund.
- Students who withdraw or leave within the third week of class (next Thursday through Wednesday in fall or Tuesday through Monday in spring) will receive a 40 percent refund.
- Studentswho withdraw orleave withinthefourth week of class (next Thursday through Wednesday in fall or Tuesday through Monday in spring) will receive a 20 percent refund.
- Afterfour weeks, there are no refunds for the above listed institutional charges.


## Institutional Aid Refund Policy

Dropping Below Full-Time: Students who drop/withdraw from a course(s) during the first 4 weeks who remain enrolled but whose enrollmentstatus becomes less than full-time will not be eligible for any University scholarships or grants.

Withdrawing From All Classes: Students who withdraw from all courses within the first 4 weeks will have their institutional scholarshipand grants reduced according to the University's Institutional Tuition Refund Policy.

## State Aid Refund Policy

The Indiana Commission of Higher Education (CHE) policy for refundsdictatesthattobeeligiblefortheseawards, astudentmustbe enrolledfull-timeattheendofthepublishedadd/dropperiod.Hence, ifastudentcompletely withdrawsfromtheUniversitybeforetheend oftheadd/dropperiod, thestudentis noteligibleforthestateaward, and the University must return 100 percent of the semester's award to CHE. After the add/drop period, the student's state aid would be 100 percentearned. Stateaid that requiresfull-timeenrollmentconsists of the Freedom of Choice Award, Student Performance Incentives, Twenty-first Century Scholarship, Mitch Daniels Scholarship, Minority Teacher Scholarship, and the State Nursing Scholarship.

## Veterans Benefits Refund Policy

The U.S. Department of Veterans Affairs requires all changes of enrollment to be certified within 30 days of action. ForVA purposes, the effective date is the date the student withdrew or dropped the course. The U.S. Department of Veterans Affairs will process the information regarding change of enrollment and may establish a debt on the student, based on the effective date of the change. It is theresponsibilityofthestudenttosatisfyanydebtestablishedonthe student by the VA.

Students withdrawing from all courses in a semester will have the current, and any future certifications terminated. If the student completely withdraws on or before the first day of the term, the UniversityofEvansvillewill returnthetuitionandfeespaymentreceived, directly to the VA, upon receipt of school debt letter. If the date of complete withdrawal is after the first day of the term, any credit balances that result from a refund of institutional charges will be issued to the student. In this case, the student will receive a debt letter from the Department of Veterans Affairs with balance due.

For students dropping a course(s), an enrollment update will be submitted to the VA. Tuition and fees are reported specific to the remainingcredithours, asifthoseweretheonly coursestakenduring the entire enrollment period. The VA will determine if the change in hours/charges requires somepercentageofrepaymentfromthestudent. Ifdebt is established, the student will receive a debtletterfrom the Department of Veterans Affairs with balance due.

Tuition Assistance: The University of Evansville will return any unearned TA funds on a prorated basis through at least the $60 \%$ portion of the period for which the funds were provided. TA funds are earned proportionally during an enrollment period, with unearned funds returned based upon when a student stops attending. These funds are returned to the military service branch.

In addition, when a service member stops attending due to a military service obligation, the university will work with the affected service member to identify solutions that will not result in student debt for the returned portion.

Military Tuition Assistance Program Refund Policy/schedule:
Studentsreceivingfundsfromthetuitionassistanceprogramwho withdraw from the University of Evansville will have their tuition assistance funds reduced as follows:

16-week semester
On or before the 1st day of classes 100\%
2nd day of class through the end of the first week $90 \%$
Second week of classes 80\%
Third week of classes 70\%
Fourth week of classes 60\%
Fifth week of classes $50 \%$
Sixth week of classes 40\%
Seventh week of classes 30\%
Eighth week of classes 20\%
Ninth week of classes ( $60 \%$ course completion) 10\% After the $60 \%$ point of the semester 0\%
The funds will be returned to the tuition assistance program/ payer. Other financial aid will be refunded according to the University's Institutional Charges and Financial Aid Refund policy.

Studentdebt,resultingfromthetuitionassistanceprogramrefund calculation outlined above, will be eligible for a 12-month equal installment payment plan to satisfy the adjusted balance.

Chapter 31 and 33- Post/911 GI Bill Benefits: The University of Evansville will permit any covered individual to attend and participate in the course of education during the period beginning on the
dateon which theindividual providestotheeducationalinstitutiona certificate ofeligibilityfortheentitlement toeducationalassistance. In addition, the university will not impose any penalty, including theassessment oflatefees, the denial of accesstoclasses, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds on ay covered individual because of the individual's inability to meet his or herfinancial obligation to the institution due to the delay of disbursement funding from VA under Chapter 31 and 33.

## Federal Aid Refund Policy

Students are encouraged to meet with the Office of Student Financial Servicesbeforechangingenrollmentbydroppingacourse or withdrawing from the University so they can be informed of the financial impact of theirenrollment changes. Enrollment is set at the end of the add/drop period each term. Students must begin enrollment in all courses to be eligible for Federal Pell Grant funds and in at least one course to be eligible for all other aid.

## I. All Programs, Except Center for the Advancement of Learn-

 ingThis policy applies to all University programs, except those administered by the Center for the Advancement of Learning (CAL) and operateona differentacademic calendar.Studentsenrolledinone of the University's CAL programs should refer to section (II) for the CAL refund policy. Refund information for summer is provided annually when summer course registration information becomes available to students.

## Dropping Below Full-Time

Dropping a class starts with the Office of the Registrar. When a student drops a course(s) but continues as a part-time student (fewer than 12 semester hours), the tuition refund will be the difference between the initial billing and the revised billing multiplied by the percentage refund as outlined in the Institutional Charges Refund Policy. Students who drop below full-time during this refund period will have their eligibility for financial aid recalculated. Enrollment for federal and state financial aid will be set at the end of the add/drop period each term, and federal and state grants will not be adjusted after this date.
If a student drops below full-time after the first four weeks of the semester,thereisnorefundofchargesorreductionoffinancialaid.
Students Withdrawing from All Courses
The official withdrawal process begins in the Office of the Dean of Students. The policy that determines the return of Title IV funds is defined byfederal regulation and calculatesearnedfederal financial aid on a per diem basis up to the 60 percent point in the semester.Federalfinancialaid thatisconsidered "unearned" is returned to the appropriate source. The amount of earned federal aid is calculated by dividing the number of calendar days completed by the total number of calendar days in the semester. AcalendarisdevelopedeachyearandmaintainedintheOfficeof StudentFinancialServicesthatoutlinesthepercentageoffederal aid earned during the first 60 percent of the term. There are no refunds (or return of Title IV funds) if the student attends classes after the 60 percent point as Title IV aid is considered to be 100 percent earned at that point.
There are two parts to a refund determination when the student withdraws from all classes.

1. Refund of institutional charges. The student's withdrawal date forinstitutional charges isthe date the studentsubmits the completed withdrawal form to the Dean of Student's Office. How-
ever,UE can determine a withdrawal date related to extenuating circumstances for a student who:
(a) left without notification because of extenuating circumstances, or
(b) withdrew because of extenuating circumstances but another party gave notification on the student's behalf. Extenuating circumstances includeillness, accident, grievous personal loss, or other such circumstances beyond the student's control.Thedean ofstudentsmakesthe determination in such matters.
2. Reduction (refund to the program) of institutional, state, or federal financial aid. The student's withdrawal date for financial aid is determined based on whether the student officially withdrew from the University or stopped attending (walked away). For those who officially withdrew, the withdrawal date is the date the student begins the withdrawal process with the dean of student's office. For those who stopped attending and failed all classes, the withdrawal date is the latter of the midpoint of the semester, the date the student last attended classes, or the last date of academically related activity such as taking a test.

## II. CENTER FOR THE ADVANCEMENT OF LEARNING

If a student in the organizational leadership, university studies, masters of leadership, or masters in public service administration program finds it necessary to completely withdraw from the University beforetheend ofasemester, thewithdrawal processbegins in the office of the director of adult education where an official date of withdrawal is determined for institutional charges refund purposes.Astudent'swithdrawaldateisdeterminedusingthesame process as for the federal financial aid refund policy. The director of adult education may determine a different withdrawal date for institutionalcharges duetoextenuating circumstancesifsuchconditions exist and can be documented.
The University's CAL institutional charges refund policy treats eachfive-weekcourseinthesemesterasaseparatecourse.Students register and arebilledforthe semesterat thebeginning oftheterm, but refunds will be calculated based upon the five-week courses completed and/or the date/time when the withdrawal occurs. Full refunds for the semester will be given if the student cancels the enrollment before attending any class in the term. Refunds that occur during the semester will be calculated as follows for each five-week course:

During week one $75 \%$ refund*
During week two 50\% refund*
During week three 0\% refund*
All other information relative to the withdrawal process is described in the regular policy and conforms to it.

Dropping Center for the Advancement of Learning Courses in the Semester
Federal financial aid eligibility is established by attending class. Students with Federal Pell Grants must begin attendance in each module.Becauseofthenatureofthefederalwithdrawalpolicy,studentswhodonotbeginattendanceinallmodules and successfully completethosemodulesmayhavetheiraid proratedbasedon return of Title IV funds regulations.
III. Returning Federal Financial Aid to Accounts

Unearned federal financial aid will be returned inthefollowing order:
Federal Direct Unsubsidized Loan
Federal Direct Subsidized Loan
Federal Direct PLUS Loan

Federal Pell Grant
Federal SEOG
TEACH Grant
Iraq Afghanistan Service Grant
The amount of aid to be returned is determined by the Federal Title IV Return of Funds calculation as provided by the U.S. Department of Education.
Any refunds of charges will be applied to the student's account and alladjustments for aid, loans, fines and non-refundablefees or deposits will be made before eligibility for a cash refund is determined. If there is a student account balance resulting from the adjustments, the student is responsible for payment.
Sample Return of Funds calculations are available in the Office of Student Financial Services.
IV. ADMINISTRATIVE FEES

Official Withdrawals
Students who officially withdraw from the University will be assessed a $\$ 100$ administrative fee.
Unofficial Withdrawals (Walkaways)
Students who simply "walk away" during a semester without officially withdrawing, and who earn all Fs or Incompletes will be assessed a $\$ 500$ administrative fee.
V. Student and Institutional Responsibilities in Regard to the Return of Title IV funds
The University's responsibilities include:
a. Providingeachstudentwithinformationabouttherefund policy.
b. Identifying students who are affected by the policy.
c. Completing the Return of Title IV funds calculation for those affected. Notice will be sent/given to student within 30 days of the withdrawal date oftheamountsthat mustbereturnedtoUE.
d. Returning federal financial aid within 45 days to the Title IV programs any funds that were disbursed directly to the student andwhichthestudentwasdeterminedtobeineligibleforviathe Return of Title IV funds calculation.
The student's responsibilities include:
a. Cooperating with UE in establishing satisfactory repayment arrangements if it is determined that a repayment is due for a Pell Grant because of the withdrawal.
b. Returning his or her share of unearned aid attributable to a loan under the terms and conditions of the promissory note.
c. Making payment to the University for any student account balance that results from the adjustments to the account.
Paymentinfullorpaymentarrangementshouldbemade within 30 days of the student receiving notice of what is owed.
This policy conforms to the Federal Return of Title IV Funds (Section668.22) regulations ofthe 1998changestotheHigherEducation Amendments.TitleIVfunds refertothefollowingfederalfinancialaid programs:subsidizedandunsubsidizedDirectStaffordLoans,Federal PerkinsLoans,Federal DirectPLUSLoans,Federal PellGrants,Federal SEOG,andTEACH grants.Federalwork-studyfundsareexcludedfrom the refund calculation.

## Cancellation of Housing and Food Service Contracts

Whenastudentcompletely withdrawsfromallclasses inthemiddle of the semester, UE housing and meal plan charges and refunds are governed by the Institutional Charges Refund Policy as "institutional charges." However, the policies governing new or continuing studentswhoremainenrolledbutwishtocancelhousingand/ormeal
plan charges are administered by the UE Office of Residence Life.
Completion of the Housing and Meal Plan Registration on WebAdvisorconstitutesalegalandbinding agreementbetweenthe student and the University of Evansville. A personalized and dated contract is generated upon completion of the online agreement on WebAdvisor.Allhousing contractsarebindingfortheduration ofthe academicyear.Therearespecific provisionsandrestrictionsregarding contractcancellation requests.Information regardingthesepolicies isfoundonlineatwww.evansville.edu/residencelife, inthestudent's personal contract, and in the Residence Life Handbook.

## UE Financial Aid Credit Balance Refund Policy

Studentswhosefinancialaidresultsinacreditbalancewill receive a refund within 14 days of the credit balance occurring unless the credit balance occurred before the term began, in which case, the refund will be issued within 14days of the start of the term. A student mayauthorizeUEtoholdacrediton theiraccountforfuturecharges, but all credits will be refunded at the end of the award year.

Credit balances that result from a Federal Parent PLUS Loan will be refunded or held per the borrower's request on the PLUS Loan Supplementalform. Parentsmaychoosetohavethebalancerefunded to them, refunded to the student, or held on the studentaccount for future charges.

Shouldacreditbalanceoccurastheresultofanoverpayment, the excess will be refunded to the payer.

Refundsareprocessedautomaticallyatleastweeklyoncetheterm beginsandenrollmenthasbeenverified.Ifthestudenthaselectedan electronic refund, it will be processed as a direct depositintothestudent'sbankaccount,usingbankinformationprovidedbythestudent. Ifastudentdoes notelect directdeposit, a papercheckwill beissued andmailedtothestudent'spermanenthomeaddress.Refundchecks will be held for pick-up in the Office of Student Financial Services upon request. Unclaimed checks will be mailed to the permanent home address after seven days.

Regardless of any authorization provided by the student and/ or parent, credit balances that resulted from a federal loan will be refundedtothestudent/parentattheend oftheawardyear in which they were disbursed.

Uncashed and unclaimed refund checks will be credited back to the student's account and the funds returned to the program from which they came.

## Payment Policy

A schedule is published annually listing registration, billing, and payment dates. As a general rule, payment may be made in full or under a two-payment plan. The two-payment plan carries a 1.5 percent-per-monthfinancechargecalculatedonthemonth-endoutstanding balance. (Copies are available upon request.)

## Responsibility of Charges

Students are responsible for all institutional charges. If any payment is not made when due, the entire balance, including accrued interest, shall, at the discretion of the University of Evansville, becomedueand payableondemand. Intheevent of anydefault, the student will be obligated to pay all collection costs and/or attorney fees incurred bythe University of Evansville in the collection of these charges.

For more information about bills and payments, call the Office of Student Financial Services at 812-488-2565.

## Campus Life

In keeping with the mission of the University, a variety of programs and services are offered to students as part of the total educational process. The goal of this developmental effort is to assist all students in reaching their maximum potential. Both out-of-class learning experiences and support services are part of this effort.

## Student Handbook

Furtherinformationonstudentservicesandguidelinesforstudent life are outlined in the Student Handbook available on AceLink or on the Student Life web page at www.evansville.edu/offices/deanstudents. The Student Handbook includes important information regarding excused absences, formal grievance procedures, and the studentcodeofconduct,sexualmisconductpolicy,andtheacademic honorcode.Everystudentis expectedtobeinformedregardingUniversitypoliciesandregulationsasdescribedintheStudentHandbook and to abide by such policies. Any student desiring more than these brief descriptions is invited to call or stop by to meet the staff for information or assistance.

## Student Affairs

The University offers a distinctive educational experience that encouragespersonaltransformationthroughawiderangeofopportunitiesforintellectual,emotional,spiritual,and physicalgrowth.Byinten-tionallycreatinganenvironmentofself-discovery,theOfficeofStudent Affairs plays a key role in the educational mission of the University. Partnering withthecampustofostercharacterdevelopmentandcommunityengagement, theofficecommitsitselftopersonalinteraction, qualityservices,collaborativeeducation,andstudentempowerment. Thiscommitmentencouragesandsupportsthejourneyofrelevantand responsible adult life.

The Office of Student Affairs consists of the Offices of the Vice PresidentforStudentAffairs and Dean ofStudents, CenterforCareer Development, Counseling Services (including disability services), Cultural Engagementand International Services, Religious Life, Residence Life, Safety and Security, and the Center for Student Engagement (includes Greeklife and volunteer opportunities), the Crayton E. and Ellen Mann Health Center, and the Student Fitness Center.

Ourstaffisdedicatedtothephilosophythatstudentdevelopment begins with entry into the University, includes in-class and out-of classopportunitiesforpersonalgrowthanddevelopment, andcontinues through and after graduation.

## New Student Orientation

During the summer, Summer Orientation and Academic Registration (SOAR) sessions are held for all new students. During this program, newstudents have an opportunity to become acquainted with the campus, meet faculty members, administrators, and other students, and learn about academic procedures and student life. During SOAR, each new student meets with an academic advisor and registers for classes. Orientation programs are also provided for parents of new students.

AnadditionalWelcomeWeekorientationtakes placejust priorto thestartoffallclasses.Thismulti-day program providesstudentswith anopportunitytomeetotherfreshmenaswellasupperclassmen.Orientation participantsareexposedtoavariety ofinvolvementopportunities availablethroughoutthecollegeexperience.Informationon campus life, academic assistance, and college adjustment issues is readily accessible to students through this special orientation program. Complete information on the orientation programs is mailed
according to the following schedule: SOAR information is mailed in thespring;WelcomeWeekinformationismailedinmid-summer.Aspecial orientation for transfer students, STAR, is also held each semester.

## Safety and Security

The Office of Safety and Security is staffed 365 days a year, 24 hours a day. Information regarding services, policies, the Annual SecurityReport,crimestatistics,andemergencyresponseprocedures can be found at www.evansville.edu/safety. For general assistance, studentsmaycall812-488-2051.Allemergenciesshouldbereported to 812-488-6911.

## Counseling Services

The University of Evansville offers counseling services that are designed to help students with a variety of life issues as they make their way through the college experience. It is recognized that interpersonal, psychological, anddevelopmentalissuescaninterfere with learning, and ultimately, personal success. The University of Evansville provides a counseling program with nationally certified andlicensed professional counselorstorespondtotheuniqueneeds of university students so they can achieve maximum benefit from their UE experience. The office is open from 8:00 a.m. to 5:00 p.m. Monday through Friday. During the months of June and July, regular counselingservicesarenotavailable.See"CrisisIntervention"below.

## Personal Development Counseling

Individual counseling is available for psychological or developmental issues such as school adjustment problems, self-esteem enhancement,relationshipissues,depression,anxiety,stressmanagement,timemanagement,substanceuseissues,andeating disorders. Healtheducationandwellnessprogramsareofferedtoassiststudents in making healthy lifestyle choices during their college careers.

## Crisis Intervention

Counseling Services is open from 8:00 a.m. to 5:00 p.m. Monday throughFriday intheRidgwayUniversity Center.Appointmentsmay bemadebycalling812-488-2663.Emergencycounselingservicesare available after hours by calling the Office of Safety and Security at 812-488-2051 and asking for the counselor on call.

## Health Education and Wellness Programs

Thehealtheducationandwellness programs areofferedtoassist students in making healthy lifestyle choices during their college careers and as a foundation for lifelong lifestyle choices. These programsprovidestudentswitheducation, prevention, andintervention programs related to substanceabuse and issues such as responsible sexualbehavior,stressmanagement,adjustment,anxiety,depression, and sexual assault.

## Information Disclosure

The Counseling Services staff abides by the professional ethical standards of the National Association of Social Workers. A counselor may notreveal informationto anyone about a client unlesstheclient gives written permission to do so. For more information, contact Counseling Services at 812-488-2663.

## Disability Support Services

The University of Evansville is committed to providing an accessible and supportive environment for students with disabilities and to treating all individuals in a fair and equitable manner. It is the policy and practice of the University of Evansville to comply with the Americans with Disabilities Act of 1990, as amended, and Section 504 ofthe Rehabilitation Act of 1973. Underthese laws, no otherwise qualified individual with a disability will be denied access to or participationincourses, programs,services,oractivities attheUniversity of Evansville.

## Procedures to Establish Eligibility

Studentswhowishtorequestaccommodationsmustfirstestablish eligibilitybyprovidingappropriatewrittendocumentationofthedisability to Counseling Services, Room 204, Ridgway University Center. As the designated disability service providers for the University of Evansville, the disability services staff of the Office of Counseling Servicescoordinatethe provision ofappropriateandreasonableacademicaccommodationsandsupportservicesforanyqualifiedstudent withaproperlydocumenteddisability.Eachstudentshouldschedule an appointment to meet with the disability services staff member (812-488-2663) for an individual consultation. During the consultation,thedisabilityservicesstaffmemberandstudentdiscussthecurrent impact of the disability in the academic setting. After reviewing the student'smedicaland/ordiagnosticrecordsandmeetingwiththestudentandfacultymember(s)asappropriate,thedisabilityservicesstaff membermakesrecommendationsforservicesorreasonableacademic accommodations for the student. The medical records and disability documentation will bemaintainedinCounselingServices andusedin accordance with applicable confidentiality.

## Procedures for Communicating with Faculty

If the student chooses to receive recommended services that requireassistancefromaninstructororotherstaffmember, arelease form signed by the student will allow the disability services staff memberto inform thenecessary staffmembers about the student's disability. The disability servcies staff member will be responsible fornotifyingeach professorin writing aboutthestudent'sapproved accommodations as well as offering assistance to implement the accommodations if necessary.

It is the student's responsibility to request the accommodations from individual professors as needed. The student should make an appointmentwitheach professortodiscusstheaccommodationsthat are needed for that particular course and to verify that the professor has received the accommodation letter. Thestudentshould givethe professortwoweeksadvancenoticeofaccommodationneedstoallow adequate time for the professor to make arrangements. Professors often report that they receive an accommodation letter from the OfficeofCounselingServices, butthatthestudentdoes notfollowup byrequestingtheaccommodations.Thissometimeshappensbecause a student feels that he or she will not require an accommodation in a particular course due to the manner in which the material is presented.Itisthestudent'sresponsibilitytorequesttheaccommodations he or she wants to use.

## Procedural Difficulties with Accommodation Requests

Theprofessorisonly requiredtomakeavailabletheaccommodationsthatarespecifiedintheaccommodationletterissued by Counseling Services. If students or faculty have difficulty with specific
accommodation needs, the disability services staffmember should becontactedforassistance.If,asthesemesterprogresses, thestudent feels that additional accommodations are warranted, the student should consult with the disability services staff member to discuss other support services or options.

## Disability Advisory Committee

The Disability Advisory Committee reviews atypical requests regardingdisabilityaccommodationsandmakes recommendations regardingrequestswhichinvolveaccommodationsrelatedtochanges in curriculum or programs. Committee members include the Coordinator of Disability Services, the Director of Counseling Services, and the University Registrar. When appropriate, other individuals relevant to the petition decision may be included in the committee meeting. The committee acts in an advisory capacity and submits written recommendations regarding each request to the Executive Vice President for Academic Affairs. The EVPAA makes final decisions on all requests. To reach the ADA coordinator for UE students, please contact Debbie Brenton at 812-488-2663. To reach the ADA coordinator for UE employees, please contact Keith Gehlhausen at 812-488-2943.

## Grievance Process

Grievance for Denial of Eligibility
If a student feels they have been unjustly denied eligibility for Disability Services, the studentshouldfirstdiscussthe problem with a Disability Services staff member. If the issue is not resolved in a satisfactorymanner,thestudentcancompletetheGrievance/Denial of Eligibility Petition. This form is available in the Dean of Students office. The written petition must be submitted to the Dean of Students within 15 days of denial of eligibility. The Dean of Students will review the petition and make a decision regarding the request.

## Grievance for Recommended Accommodations or Lack of

 Compliance with AccommodationsIfastudentisdissatisfiedwiththeaccommodationsrecommended byaDisabilityServicesstaffmemberorthestudentfeelstheyarenot receivingtherecommendedaccommodationsfromtheirinstructor, the student is asked to discuss their grievance directly with the DisabilityServicesstaffmembertotrytoreachanagreement.Iftheissue isnotresolvedinasatisfactorymanner,thestudentcancompletethe Grievance/Denial of Accommodation Petition. Thisform is available in the Dean of Students Office. The written petition must be submitted to the Executive Vice President of Academic Affairs (EVPAA) within 15 days of the initial complaint. The EVPAA will review the petition and make a decision regarding the request.

## Grievance Appeal Process

If a student is not satisfied with the decision made through the GrievanceReviewProcessandbelievestheyhavebeenharassedordiscriminatedagainstbecause oftheirdisability, they may then contact the Institutional Equity and Title IX Coordinator to file a complaint asoutlinedintheUniversity's HarassmentandDiscriminationPolicy.

## Subsequent Semesters

Students who wish to have academic accommodations must contact the Office of Counseling Services at the beginning of each semestertoreviewprogress, reviewthestudent'sscheduleandneeds for the semester, and secure appropriate releases for notification of
professors.Thestudentisresponsibleforschedulingtheappointment.

## Further Information

For further information contact Karen Stenstrom, director of counseling services, or Debbie Brenton, coordinator of disability services, at 812-488-2663. Information regarding documentation guidelines and grievance procedures are available upon request.

## Center for Career Development

The Center for Career Development provides a primary link to the off-campus world of work for both students and alumni by offering a variety of career andjob search related services. The office monitorsemploymenttrends; postsup-to-dateonlinelistingsoffulltime, part-time,temporary,andsummerjobopportunities;schedules on-campusinterviews;maintainsstudentresuméfilesinHandshake; compiles employer information; and coordinates a wide range of programs and activities designed to provide useful information on preparing for the world of work.

Actively involved in the University's experiential educational efforts, theofficeadministersthecooperativeeducationprogramand assistsstudentswhoseekinternships.Additionally,itoffersindividual careeradvising, careerguidancesoftwareprograms, andresourcesfor studentswhoareexploringvariouscareersandmajors.Theofficealso providesmockinterviews,groupworkshopsincareerresearchstrategies, effective résuméandcoverletterwriting, interviewtechniques, and preparation for graduate school. A comprehensive website and entry into the world of work is found on the office's web page at www. evansville.edu/careercenter.

## Community Service Initiatives

University of Evansville students, faculty, and staff enjoy a rich tradition of volunteerism within the Evansville community. Volunteering enhances life skills development and builds a sense of civic responsibilitycharacteristic ofaneducatedindividual.Thesecharacteristics arehighly valued by employers and critical to members of a democratic society.

Under the supervision of the director of student engagement, studentvolunteercoordinatorsmatchstudentvolunteerinterestswith theneedsofthesurroundingcommunity.Locatedonthesecondfloor of the Ridgway University Center, students may call the office at 812-488-2538 from 8:00 a.m. to 5:00 p.m. Monday through Friday.

## Residence Life

Several housing options are available for full-time students. Six residencehallsarelocatedoncampusforsinglestudents.Sixfraternitieshavelivingaccommodationsfortheirmembers.Severaladditional alternate housing units (the University Villages), including small cooperativehouses,townhouses, andapartments,arealsoavailableto upperclassmen.Otherstudentscommutefromtheirhomesorprefer off-campus living in privately owned facilities.

All students must reside on campus for a minimum of two academic years or the equivalent of four full term semesters. Transfer students with less than 60 academic credit hours earned at previous institutions (excluding bridge, early-college, dual-credit, and advanced placement credit) arealso required tolive on campus or in University-sponsored housing.

Students who meet one of the following criteria may request an exemption:

1. The student has attained the age of 21 prior to the start of the academic year
2. The student's local residence is with parentsor legal guardians (Transfer students may have a local residence with immediate family over the age of 21)
3. The student is married and/or must live with a dependent.

A complete description of residency requirements for students (includingtransfers) canbefoundontheUniversitywebsiteandinthe Student Handbook.

The residence halls are an integral part of the UE academic communityandhavebeendeveloped,staffed,and programmedtoprovide an environment that enriches the educational experience. Further informationontheresidenceunits,includingregulationsforresidential living, may be found in the Student Handbook.

## Health Center

The Crayton E. and Ellen Mann Health Center is staffed by threelicensedregisterednurses and apart-timephysician. Basicfirst aid, medication, and treatment for minor illness are provided at the center. Students who are seriously ill or require hospitalization will be referred to other facilities. In addition, the center provides health information and health counseling.

Full-time UE students are eligiblefor treatment ofminorillnesses at the health center. A registered nurse is available during regular hours. Each student must be evaluated by a staff nurse prior to an appointmentwithaphysician. Emergencyproceduresareinplaceat the center for students needing immediate care.

The University provides a health information form that must be completed by all students prior to registration for the first semester. Thehealthinformationformrequiresimmunizationinformationand allows for the student to share health insurance information. Note: The University of Evansville strongly recommends that all students carry adequate health insurance.

The Crayton E. and Ellen Mann Health Center is located in Sampson Hall, next to the McCurdy Wing of the Schroeder Family School of Business Administration Building. The center's telephone number is 812-488-2033. The health center hours are posted on the University website on the studenthealth center link at the beginning of each school year.

Duringsummersessions, thecenter's hoursarelimitedwithnurse coverageonly.Thehealthcenterisclosedduringsemesterbreaksand some holidays. Hours may vary according to University needs.

## Diversity Initiatives

The University of Evansville is committed to creating an environment that celebrates the diversity of all cultures. The campus environment fosters a broader sense of community by providing all studentswithcross-culturalexperiencesandsupportingtheneedsand interests of all students.

Programsofferedthroughouttheyearincludeguestspeakers,film presentations, paneldiscussions,workshops, andforumsdesignedto enhance awareness of cross-cultural issues and race relations.

## Religious Life

As a United Methodist Church-affiliated institution, the vision of the Office of Religious Life is to connect the soul of God to the heart of the University.

The mission of the Office of Religious Life seeks to support the expressionofreligiouscommitmentthroughworship,service,study,and fellowship.

Neu Chapel represents the heart of religious life on campus and is a safe place for spiritual growth and interfaith exploration, where
students can engage the spiritual dimension of life and be vitally connected to their faith tradition. Our freestanding chapel, built in 1965 includes a 350-seat sanctuary, the Office of Religious Life, Grabill Lounge, the John Wesley Gallery, and the Kell Interfaith Prayer Room.

Various types of worship experiences and Roman Catholic Mass areheldthroughouttheacademicyearinNeuChapelfromacrossthe campus and the local community. A number of diverse Bible studies andfellowshipgroups are offered throughout the week by ateam of campusministerswhorepresenta variety ofreligioustraditions. The Director of Religious Life is also available for individual spiritual formation and counseling.

Realizingouridentityasachurch-relatedinstitution, wearecalled to initiate and promote better relationships between Christians and otherfaithcommunitiesoftheworldbasedoninformedunderstanding, critical appreciation, and balanced perspective ofone another's basic beliefs. The Office of Religious Life seeks to implement interfaith initiatives by intentionally bringing together people of diverse religioustraditionsfortheeducationalbenefitofUEstudentsandthe larger community.

## Dining Facilities

The University of Evansville contracts with Chartwells to provide quality dining for University residents. Dining on the Evansville campus is offered through a number of venues. For details see the residence life web page evansville.edu/residencelife/dining.cfm.

## Cultural Events

Numerous cultural and educational events are available to studentsthroughouttheyear. Theseincludeartexhibits, drama productions, readings, concerts, recitals, and lectures.

## Recreation and Athletics

Bypromoting physicalwell-being,mentalstimulation,andsocial interaction,recreationalandathleticactivitiesattheUniversityforma keycomponentofthetotaleducational program.Studentsareencouragedto participateinsportsinstruction, activities, and competitions.

Asa member oftheNational Collegiate Athletics Association, the University sponsors intercollegiateteamsformeninbaseball,basketball, cross country, golf, soccer, and swimming and diving, and for women in basketball, cross country, golf, soccer, softball, swimming and diving, tennis, and volleyball. In addition, UE has a well-balanced intramural and recreational activities program.

## Student Engagement

Located in the Ridgway University Center, the Center for Student Engagementserves as the central clearinghouse for all student organizations and campus activities. Core services include student organizationandcampus-wideeventsregistration,volunteerservices, civic engagement, Greek life, and leadership programming. The center strives to link student interests and skills with campus and communityprograms thatenhancethestudent's overalleducation.

## Cultural Engagement and International Services

The Office of Cultural Engagement and International Services assistsinternationalandAmericanstudentsinavariety ofwaysrelated to the international dimensions of their education. As the central officeon campusformatters concerning international students, the
office assists students in their adjustment to the University and the Evansville community and provides support services to ensure that eachstudent'seducationalexperienceissuccessful.Theofficeadvises studentsonimmigrationandacademic, personal,financial,and professionalconcerns.Inaddition, theofficeprovidesprogramsdesigned toenhanceeachstudent'sacademicexperienceandtohelpeveryone learnmoreabouteachotherandtheworldinwhichwelive.Regularprograms include cultural events sponsored by the International Club, the International House, and the UE Global Friends and Families Program.

## UEngage Transcript

UEngageisanonlinesoftwarethattracksandmanagesallstudent organizations, their membership and events. Through this system, students can manage an experiential transcript that can be used to reflectuponall oftheirinvolvementswhileastudentattheUniversity of Evansville. Students have control over what is displayed on their experientialtranscriptandcanprovideittoemployersorshareitwith a career advisor to highlight experiences on a resume or interview process.

## Leadership Academy

The Leadership Academy is a two-year, three-tiered program for selected students wishing to enhance and apply their leadership potential. The academy focuses on personal development (Tier I); groupdevelopment(TierlI);andcommunityinvolvement, volunteer service, mentor programs, and presentation development (Tier III). The academy is under the supervision of a student advisory council and the Student Government Association.

## Student Government Association

TheStudent GovernmentAssociation providesasoundingboard for studentideas, fosters academic freedom and responsibility, promotes student rights and responsibilities, recruits students to serve on administrative and faculty committees, and seeks to improve inter-University communication and relations.

## Student Congress

Members represent students from residence halls, commuters, alternative housing, and all organizations. The congress serves as the legislative body ofthe Student Government Association and has authoritytoadviseandinitiatelegislationonissuesofstudentinterest or concern.

## Student Activities Board

The Student Activities Board initiates campus-wide social and educational programming, including concerts, films, lectures, and recreational opportunities.

## Student Media and Publications

## Crescent Magazine

A monthly magazine printed for the UE community by students, theCrescentMagazineservesasaforumforcampusnewsandopinions through its editorials, columns, and letters to theeditor. Coverage of national, local, and campus issues are included in each issue.

## Literary Review

Two literary magazines, the Evansville Review and Ohio River Review, are produced by students.

## Student Organizations

Students are encouraged to create orjoin student organizations based on the Student Handbook guidelines. Student organizations enhancethecollegeexperiencebyprovidingpracticallearningopportunities with fellow students and faculty. A current list of all student organizations is available in the Center for Student Engagement or online at evansville.edu/organizations.

## Academic, Professional, Honorary

Classroom learning is enhanced through informal faculty and studentinteractionamongacademicorganizations.Studentsapply whattheylearninclassthrough programming,regionalandnational competition, workshops, field trips, and professional conferences. Manydisciplinesalsoofferselectivehonorarysocietiesthatrecognize outstanding achievement and character.

## Athletics Support

Athletics support organizations support varsity athletic teams throughdanceandcheerteams.Membershipisofferedthroughtryouts in the fall.

## National Social Fraternities and Sororities

Membership is offered in the form of "bids" or invitations after a series of recruitment events. Social fraternity and sorority membership providesopportunitiesforsocial,civic,academic,andleadership development, as wellas brotherhoodandsisterhood.Currentmen's fraternities include Lambda Chi Alpha, Phi Gamma Delta (Fiji), Phi Kappa Tau, Sigma Alpha Epsilon, Sigma Phi Epsilon, and Tau KappaEpsilon.Women'sfraternities(referredtoas sororities) include Alpha Omicron Pi, Chi Omega, Delta Omega Zeta (local sorority), Phi Mu, and Zeta Tau Alpha. Visit greeklife.evansville.edu for more information.

## National Fraternity and Sorority City Chapters

City-wide Greek chapters are offered to students who seek a broaderbaseofmembershipthatmayincludemembersfromoneor morelocalcollegesanduniversities.Alumnichaptermembersoften helpfacilitatetheseorganizationsthroughtheirclosecontact.Historically African American fraternity and sorority city chapters include Alpha Phi Alpha Inc., Kappa Alpha Psi Fraternity Inc., Alpha Kappa Alpha Sorority Inc., and Delta Sigma Theta Sorority Inc.

## Student Publications

Thestudentmagazine(CrescentMagazine) andliteraturereviews (Evansville Review and Ohio River Review) offer journalistic training and literary expression with national award-winning publications.

## Religious

Students are encouraged to pursue their personal faith journeys through regular meetings, worship, spiritual retreats, volunteer service, and social activities.Mostmajor religions and Christian denominations are represented at UE.

Social, Civic, Recreational
The majority of student organizations fall into this category. Theseorganizationsofferbroad social, cultural, and community service opportunities. Membership is open to all students with similar interests.

## Student Government

Leadership, governance,andstudentserviceepitomizethephilosophyandmission ofstudent government. Full-timestudentactivity fees fund these organizations, which in turn provide an array of programsandservicesfortheentirestudentbody.Membershipisby election and appointment.

## University Committees and Task Forces

Many Universitydepartments offerrewardingpersonalandleadershipdevelopmentexperiencesthatalsoservetoassistadministrative functions. Membership is offered through administrative selection processes and appointments.

## University of Evansville Libraries

University ofEvansvilleLibraries provides anarray ofinformation services that underwrite the curricularand research programs of the University. Services range from traditional library collections and electronic full-text databases to individualized referenceassistance and library instruction. Information on library holdings is available through the online catalog and discovery system known as QUEST, which is accessible across campus as well as remotely.

UE Libraries' collections include more than 240,000 bound volumes of books and periodicals, access to more than 21,000 scholarly e-journal titles, and access to many important online research databases.Collectionsaresupplemented byanactiveinterlibraryloanservicethrough which theresources ofotherlibrariesaremadeavailable to students and faculty. Circulation policies permit books, journals, DVDs and CDs to be borrowed.

UELibraries is open extensive hours each week during academic semesters. Professional librarians are eager to assist students with research assignments as well as with general information needs. UE Librariesoffersextensivequietstudyareasforindividuals andgroups, including private study rooms that may be reserved in advance. SpecializedservicesandresourcesincludetheUniversity Archives as well as the Multimedia Learning Resources Center located in Graves Hall. UE Libraries supports study and teaching at Harlaxton College by providing access to online databases available on the Evansville campus.

Visit the Libraries' web site (evansville.edu/libraries/) or contact the Information Desk at 812-488-2482 for more information.

## Degrees, Curriculum, Academic Opportunities

## Degrees

## Baccalaureate Degrees

UE offers undergraduate programs leading tothe Bachelor of Arts (BA), Bachelor of Fine Arts (BFA), Bachelor of Music (BM), and Bachelor of Science (BS) degrees. A complete list of majors, concentrations, and preprofessional programs follows.

## Graduate Degrees

UE offers the following graduate degrees: Master of Physician Assistant Science, Master of Science in Athletic Training, Master of Science in Health Services Administration, Master of Science in Leadership, Master of Science in Public Health, Master of Science in Public Services Administration, and Doctor of Physical Therapy.

## Certificates

UE offers two certificate programs: Integrating Business and Career Education (iBACE) and an Energy Engineering Certificate. iBACE is open to all students outside of the School of Business and the Energy Engineering Certificate is open to engineering students.

## Graduate Certificates

UE offers the following graduate certificates: Non-profit Leadership, Innovation, and Higher Education Leadership.

## Organizational Structure and Programs of Study

TheUniversity's instructional programis organized intofouracademiccolleges,andschools,twospecializedcentersofeducationand the special study abroad site of Harlaxton College in England.

[^0]Organizational Communication Specialization
Health Communication
Sports Communication
Department of Creative Writing
Creative Writing
Writing
Department of English
Literature
Environmental Studies
Environmental Administration
Environmental Science
Department of Foreign Languages and Cultures
French
Latin
German
Russian
Greek
Spanish
Gender and Women's Studies
Department of History
History
Interdisciplinary Studies
International Studies
Department of Law, Politics, and Society
Criminal Justice
Political Science
Sociology
Anthropology Specialization
General Specialization
Gerontology Specialization
Department of Mathematics
Applied Mathematics
Mathematics
Mathematics - Education
Predoctoral Mathematics
Statistics and Data Science
Department of Music
Music
Music Management Specialization
Music Education
Music Performance
Music Therapy
Department of Philosophy and Religion
Cognitive Science
Ethics and Social Change
New Testament Greek
Philosophy
Religion
Department of Physics
Physics
Physics - Education
Preprofessional
Pre-dentistry
Pre-pharmacy (two-year)
Pre-law
Pre-physician assistant
Pre-medicine
Pre-theology
Pre-optometry

Pre-veterinary Medicine
Department of Psychology
Neuroscience
Psychology
Department of Theatre
Stage Management
Theatre Studies
Theatre Design and Technology
Theatre Management
Theatre Performance
Schroeder Family School of Business Administration
The school offers the following programs within the confines of its organizational umbrella:

Accounting
Finance
Global Business
Logistics and Supply Chain Management
Management
Marketing
Also available is a Bachelor of Arts and a Bachelor of Science degree with a major in Economics.

## College of Education and Health Sciences

The College of Education and Health Sciences offers a number of programs in education and health sciences that share common pedagogicalapproachestoteachingthroughsupervisedteachingand clinicals.

School of Education
Multi-Grade Education Music
Elementary Education
Senior High, Junior High, Middle School Education
Art
English
Foreign Languages
Mathematics Science: Life Science, Chemistry, Physics
Social Sciences: HistoricPerspectives,CivicsandGovernment, Economics, Psychology, and Sociology
Social Studies
Theatre
School of Health Sciences
Athletic Training (bachelor's and master's degrees)
Clinical Laboratory Science
Exercise Science
Health Services Administration (bachelor's and master's degrees)

Public Health (bachelor's and master's degrees)
Dunigan Family School of Nursing Nursing
Department of Physical Therapy
Physical Therapy (doctoral degree)
Department of Physician Assistant Science
Master of Physician Assistant Science
College of Engineering and Computer Science
The College of Engineering and Computer Science provides an array ofprofessional programsincomputerscience,civilengineering, computerengineering, electricalengineering,mechanicalengineering, and software engineering organized in two units as follows:

Department of Electrical Engineering and
Computer Science

Computer Science
Computer Engineering
Electrical Engineering
Software Engineering
Department of Mechanical and Civil Engineering
Civil Engineering
Mechanical Engineering

## Harlaxton College

HarlaxtonCollegeoffersasemesterofintenseacademicandexperiential learning in British and European culture. An interdisciplinary course, The British Experience from the Celts to the Present Day, is taughtbyateamofexcellent British professors andis integratedwith superbtravelprograms.Inaddition, coursesareofferedintraditional academicsubjectsbyvisiting professorsfromseveralUSuniversities.

```
Center for Adult Education
    Leadership (master's degree)
    Organizational Leadership
    Public Service Administration (master's degree)
    University Studies
```


## General Requirements for Baccalaureate Degrees

Summary of Requirements
To receive a baccalaureate degree, a student must:

- Complete at least 120 semester hours of credit (or more as required for specific programs)
- Complete the Enduring Foundations General Education Program (41 hours)
- Complete a major program of study - at least 51 percent of the courseworkinthemajormustbecompleted at UE (seespecific requirements for each major)
- Earn a minimum grade point average of 2.0 in both the major and the total program of study
- Complete at least 48 semester hours of credit at UE
- Complete at least 39 semester hours of credit in courses numbered 300 or above
- Satisfy the foreign language proficiency requirement
- Satisfy the residency requirement
- Formally apply for the degree no later than one year before anticipated graduation
Specific degree program requirements arestipulated bytheacademic unit offering the degree.

No credit toward graduation is awarded retrospectively to low-er-levelcourseworkbasedsolelyuponsatisfactorycompletionofmore advancedcourseworkinthesamesubjectarea,exceptforacademic sequencecoursesinforeignlanguagesandculturescompletedatthe University of Evansville.

## Credit Limits for Bachelor of Arts Degree

No morethan 45 hours in any single subject area may be counted toward the Bachelor of Arts degree.

## Writing Proficiency Requirement for Freshmen

All incoming freshmen are tested for writing skills through the SAT or ACT as a part of registration for their first terms in residence on campus. Students who do not meet the criteria of entry level collegewritingthroughachievementofaspecifiedscoreonthewriting portion of the selected exam will be required to enroll in First-Year Seminar 111. Those meeting the minimum writing proficiency will be placed into First-Year Seminar 112.

## Writing Proficiency Requirement for

Transfer and Part-Time Students
All transfer and part-time students are tested for writing skills
through the SAT or ACT prior to their first terms in residence. Those students who do not have an SAT or ACT score will be required to complete UE's writing placement exam. Students who do not meet thecriteria ofentry-levelwritingthroughachievementofaspecified score on the writing placement exam will be required to enroll in First-Year Seminar 111 in their first year to provide extra help in developmentalwritingskills.Studentswhomeetthecriteriaonentrylevelwritingthroughachievementofaspecifiedscoreonthewriting placement exam will be enrolled in First-Year Seminar 312.

Writing Proficiency Requirement for
International Students
All international students may be required to sit for a writing placement exam prior to their initial registration at the University of Evansville. This exam will be administered by the Office of Cultural Engagement and Student Services and will be read by the director of the Writing Center, who will determine the appropriate writing sequence for each student.

International students who are required to enroll in English language courses must take First-Year Seminar 111E before taking First-Year Seminar 112. Students must obtain at least a C in English Language (EL) 111 before enrolling in First-Year Seminar 111E.

Students should begin the First-Year Seminar sequence as soon aspossibleaftersuccessfully completing Englishlanguage courses in ordertomaintain progressin reading andwriting, andtodevelopthe academic skills necessary for success at UE.

Note that a maximum of nine hours of English language courses may count toward elective requirements for a degree.

International transferstudents will be placed in appropriatewriting and reading courses on the basis of the writing exam and the Michigan Test of English Language Proficiency. Course work would be selected from English Language 102, 103, 106, 107, 110, and 111.
Foreign Language Proficiency Requirement
All students entering the University are required to demonstrate proficiency in a foreign language equivalent to the completion of a university-level, first-year foreign language course numbered 112.

AllBachelorofArtsdegreecandidatesarerequiredtodemonstrate proficiency in a foreign language equivalent to the completion of a university-level,second-yearforeignlanguagecoursenumbered 212 .

TheBachelorofArtsdegreeininternationalstudies requiresproficiencyinreadingandspeakingaforeignlanguageatalevelequivalent to that achieved by satisfactory completion of a foreign language through the third year; or two years of college-level competency in two foreign languages.

These requirements shall be met in one of two ways: by satisfactory completion of the appropriate level offoreign language course workat the University of Evansville or another accredited institution of higher education. Course credit will not be awarded through the proficiencyexam,butstudentsmaymeettheforeignlanguageproficiency requirement (equivalent to 112 for $B S$ degrees, equivalent to 212 for BA degrees) by achieving particular scores on the proficiency exam. The tests are administered only during freshman registration and placement scores expire after one year. See details below.

Theforeignlanguageproficiencyrequirementwillbemetthrough the second-year University level if a student successfully completes one of the following: (a) completion of a third-year college course in aforeignlanguageorintroductiontoliterary analysis (b) completion of the College Board Advanced Placement Exam with a grade offour or five. Advanced placement examinations are administered in May at approved testing centers. Should a student take both the Spanish Literature AP exam in addition to the Spanish AP exam and receive a
four or five on both, students will place into Spanish 311 and receive 3 credits for a UE elective course not in Spanish.

## Foreign Language Proficiency Testing

1. Proficiency testing is required for all students with previous foreignlanguageexperience.Proficiencyscoresexpireafterone year and students waiting longer than one year to enroll into the course in which they place, must retake the proficiency exam through the department of Foreign Languages and Cultures.
2. Studentstakingaproficiencyexammayenrollonelevellower than the exam warrants, with the advice and consent of the student's advisor and the chair of the Department of Foreign Languages and Cultures.
3. Non-graded course credit will be awarded through the proficiency exam ifstudents enrollone-level higherat UE and pass thecoursewithaCorbetter.Shouldstudentsmeettheforeign language proficiency requirement (equivalent to 112 for BS degrees, equivalent to 212 for BA degrees) by proving proficiencyontheexamforthatlevelbutnotenrollinthenextlevel, they will meet the foreign language proficiency requirement but receive no credit.
4. Students who begin their foreign language study above the 111 level will receive up to six hours of non-graded credit in introductory or intermediate level courses below that level if theysuccessfullycompletetheupper-levelcoursewithagrade of C or higher at UE. Example: Student places into French 211. Upon successful completion of French 211 at UE, the student will receive six hours of non-graded credit for French 111, 112. The Office of the Registrar will process these retroactive credits.
5. No additional credits will be granted to students who are awarded transfer credits in foreign language from approved academic institutions.

International Students
All students whose native language is not English take the Michigan Test of English Language Proficiency in addition to the University's writing skills test as a part of registration for their first term in residence on campus. Placement in appropriate Englishlanguage improvementcourses willbemadeto providestudentswiththeskills necessarytodemonstrateEnglishproficiency.Astudentmayapplyno morethanninehoursofEnglishlanguagecoursestowardgraduation requirements if the student's program permits free electives.

Students whose native language is not English will satisfy the foreign language requirement by meeting the University's writing requirement;however, nocredithoursaregrantedtowardgraduation. (Refer to the "Writing Proficiency Requirement" section for details). Furthermore, native speakers of a foreign language may not earn hours toward graduation for foreign language classes in the 111-212 courses or 300 level conversation courses in their native language.

## Residency Requirement

In order to ensure that degrees awarded meet the standards and expectationsoftheUniversity,alldegree-seekingstudents,regardless of major, must earn in residence at the University:

1. At least 48 degree-applicable semester hours;
2. The majority of hours in the major, subject to requirements of specific majors; and
3. The last 15 credit hours toward the degree.

The number of credits a student may transfer to the University of Evansville onceheorshehas matriculated is limited to three courses (maximum of 10 semester hours). Such transfer credit must have the
priorapproval ofthestudent'sacademicadvisorandtheregistraron a Transfer Credit Request form filed with the Office of the Registrar.

Requests for exceptions to the residency requirements must be submitted in writing to the Admissions and Standards Committee.

## Requirements for an Additional Degree

After earning a baccalaureate degree at the University of Evansville, to be eligible for an additional baccalaureate degree, a student must earn a minimum of 30 additional hours in excess of those requiredforthepreviousdegreeandmeetallspecifiedrequirements forbothdegrees.Aminimumgradepointaverageof2.0mustbeearned inthetotal program ofstudy. The same courses maybeusedtomeet the requirementsforanadditionaldegree.Completionofadoublemajordoes not automatically mean requirements for two degrees have been met.

## Requirements for an Additional Major

To earn an additional major, a student must complete all requirements for that major as listed in the catalog, including all ancillary courses.Aminimumgradepointaverageof 2.0 mustbeearnedinthe additional major. At least 51 percent of the hours in the major must be completed in residence. Completion of an additional major does not necessarily mean requirements for two degrees have been met.

## Requirements for a Minor

A minor is not required for graduation, although one may be recommended by various departments. If a department offers a minor, the requirements will be listed in that department's section of this catalog. A minor will generally require at least 18 semester hours of course work (some of which may be specified) in the minor subject area, and completion of at least 51 percent of the course work in residence at UE. A minimum grade point average of 2.0 must be earned in the minor.

## Enduring Foundations General Education Program

The University of Evansville is committed to the liberal arts and sciencesservingasthecenterofeverystudent'seducation.Thebreadth ofknowledgeandengagementthatischaracteristic ofaliberaleducation is central to developing strong students from across all majors at the University who are prepared to live and thrive as global citizens in our increasingly complex, diverse, andchanging world. The Enduring Foundations General Education Program provides students with that strongfoundationintheliberalartsandsciencesandsupportstheUniversity's international focus and commitment to social responsibility. Theprogramisframedinterms ofstudentlearning, clearlyidentifying the variety of ways that students will develop knowledge and skills, exercisecreativity andinnovation, engagebigquestions, and learnto make a difference in their world. The Enduring Foundations General EducationProgrammakesupapproximatelyone-thirdofeveryundergraduate degree at the University.

General Education Objective
Engagedinthehumanquestforwisdominits varied expressions and informed by a core cultural, analytical, and scientific literacy, graduates will be prepared to think critically, communicate effectively,judge ethically, actresponsibly, and leadfull, rich, and productive lives as global citizens.

General Education Outcomes
As a result of this curriculum, graduates shall demonstrate:

1. Critical reading and thinking (3 hours)
2. Engagementwithimaginativeexpressionsofthehumancondition (3 hours)
3. Knowledge of humanhistory and thehistorical contextofknowledge (3 hours)
4. Engagementwithfundamentalbeliefs abouthumanidentity,core values, and humankind's place in the world (3 hours)
5. Understandingofhumanaestheticcreationandartistic creativity (3 hours)
6. Linguisticandcultural competenceinalanguageotherthanone's own (6 hours)
7. Quantitative literacy (3 hours)
8. Scientific literacy (7 hours)
9. Understanding of core concepts of society, human behavior, and civic knowledge (6 hours)
10. Knowledge and responsibility in relation to health and wellness (1 hour)
11. An ability to think critically and communicate effectively, orally, and in writing. (3 hours)
In addition to these outcomes, all students must meet university requirements for writing across the curriculum.

General Education Courses
A list of specific courses that satisfy the core general education andoverlaygraduation requirementsoutlinedbelowcanbefoundon the Enduring Foundations General Education websiteorthe registrar's website.

General Education for Transfer and
Part-Time Students
Aswithtraditionalmatriculatingfreshmen,transferand part-time students will need to complete the samegeneral education requirements. Often, but not always, students who transfer in courses from another institution will meet some or even many of the general educationrequirementsthroughthosetransferredcourses, dependingon the nature and number of what is transferred. Evaluation of transfer applicationswill providespecificinformationonwhatrequirements are met through a particular student's transferred courses.

## Assessment of Academic Programs

All academic programs at the University of Evansville assess student learning on a regular basis. The mission of student learning assessment is to improve student learning and enhance the effectiveness of the academic programs at the University of Evansville by objectively measuring learning outcomes and using the results to inform both continuity and change. The assessment of student learningisconductedattheprogramlevelbutiscoordinatedandevaluated byanAcademicAssessmentCommitteeconsistingofafaculty memberwho serves as chair, otherfaculty members, the dean ofthe College of Arts and Sciences, and administrators from the Office of the Vice President for Academic Affairs, Student Life, and the Office of Institutional Research. The information gathered is used by the academic programstocontinually monitorwhethertheknowledge, skills, andattitudes ofstudentsaremeeting learningoutcomes ofthe program and the educational objectives of the University.

## Special Educational Opportunities

ChangeLab
ChangeLab is program that offers students a chance to use their skills to create positive change in the community locally or globally. Students of any level and any major may participate in the ChangeLab, andmanychoosetotakemultipleChangeLabcoursesthroughout their time at UE. In this experiential program, students enroll in aclassandworkaspartofamultidisciplinaryteamto provideservices
or develop innovative solutions.
ChangeLab projects address the needs of clients whose organizations may be for-profit companies, non-profits, or government agencies.Additionally,theChangeLabprogramalso offersstudents the unusual opportunity to propose their own course project and workonprojectstheyarepassionateaboutwhileearningclasscredit. UE students who participate in the Changemaker Challenge often choose to continue their Changemaker projects by proposing their ownChangeLabcourse.Inanygivensemester,studentshavearange ofprojectstochoosefromaddressingsuchtopicsasalternativeenergy, neuromarketingresearch, infantmortality, urban planning, product development,foodwaste,globalmarketexpansion,andmore.Many projects are conducted in Evansville, but some take place in places such as Guatemala, Cuba, and Harlaxton.

Whether working on a project proposed by a client or one they have proposed themselves, students work as part of a diverse team guidedbyfacultycoachesandindustryexpertstodelivervaluableand meaningful results. Additionally, they receive training in teamwork, projectmanagement,creative problemsolving,andpresentationskills throughworkshops providedthroughoutthecourse.AllChangeLab projects culminate with a professional presentation to the client organizationorprojectstakeholdersoutliningtheirresearchfindings andrecommendedsolutions.ParticipationinChangeLabenablesUE students not only to develop skills critical to the workplace but also provides guidance on ways to showcase those skills to prospective employers or graduate schools. Through this unique experiential program,studentshaveanunparalleledopportunitytodeveloprealworld problem-solving skills that prepare them for the increasingly complex challenges and ever-changing environments of the 21st century.

## Honors Program

The Honors Program offers highly motivated and talented students the opportunity to participate in unique academic and extracurricularexperiencesalongsidepeersandfaculty whosharethelove of learning and desire to excel. Honors students are known for their passion and collegiality, and they serve as catalysts who propel the University's academic excellence forward.

The Honors Program provides curriculum that challenges students to maximize their potential in all areas of study and fosters independent thinking. Honors students enroll in at least 15 hours of Honors courses, which are designed to offer a particularly stimulatinglearningexperienceandtheoccasionforclosecollaborationwith faculty and other Honors students. These classes are often special Honors sections of courses that students are already taking for completionoftheirmajororgeneraleducationprogram.HonorsProgram students also complete an Honors project, which serves as the capstoneoftheHonorsexperienceand providesauniqueopportunityfor studentstoexploreanareaofstudyaboutwhich theyarepassionate. Students present this culmination of their work to faculty and other studentsduringtheHonorsProgrampresentationsessionsheldeach spring. In addition to these requirements, students must maintain a minimum GPA of 3.5 to remain in the Honors Program.

TheHonorsProgramalsoenhancesone's social experienceat the Universitybyfosteringalivelycommunitylifeamongitsparticipants. HonorsstudentshavetheopportunitytoliveintheHonors residence hall (Powell) and engage in Honors-sponsored events, including informal gatherings, trips, and the annual Nerd Wars trivia competition. The Honors Program also encourages its students to engage in a variety of other extracurricular and cultural activities across the campus and in the community.

Both prospective and current students who meet admission
requirements are encouraged to apply. As application criteria can change from year to year, anyone interested in applying to the program should consult with the Office of Admission or Honors Program staff regarding the current requirements.

## Undergraduate Research Program

Developed with support from the Lilly Endowment Inc., the undergraduate research program known as UExplore provides students and faculty the opportunity to work together on research by providing funding for joint projects. Undergraduate research is definedinabroadsenseasresearch,scholarship,orcreativeactivities, and thus includes projects from the sciences, humanities, fine arts, and professional programs.

Forstudent-generatedproposals, thestudentresearcherisresponsibleforthemajority oftheconceptdevelopment, projectdesign, and proposal writing. Student and faculty collaboration, however, is an essentialpartoflearning.Inmostcases,researchresultsarepresented atcampusseminars,regionalandnational conferences,orpublished.

Eligiblestudentsmayparticipateinfall-semester,spring-semester, orsummerresearch projects.Financialsupportisavailableintheform of summer research stipends with free double-occupancy housing duringthe 10-weeksummerresearch periodand grantsformaterials, equipment, or services. Semester projects are limited to grants for materials, equipment, or services. Travel grants are also available for studentspresentingpapersattheNationalConferenceonUndergraduate Research or other discipline-specific conferences.

Cooperative Education (Co-op)
Cooperative Education at the University of Evansville is paid, career-relatedemploymentintegratedwithacademicprogramsrequir-ingatleastthreemeasurablelearningobjectives,self/employerevaluation and reflective writing. Thisflexible learning option is available for all undergraduate majors. There are two options available: Traditional (Full-Time) and Concurrent (Part-Time). The University of Evansville's Cooperative Education Program is managed by the Center for Career Development in full collaboration with each College or School.

Traditional co-op requires most students to complete a 5 year program, as compared to a traditional 4 year academic program. A paid educational employment experience that is full-time, 30-40 hours of work per week for 12-15 weeks. Students must complete at least 3 separate work periods and will usually, but not always rotate betweenworksessions. Sometraditionalco-opopportunitiesmaybe inconsecutive semesters of work, which may provideflexibility with coursesequencingandacademicrequirements. Allstudentsshould maintain communication with their academic advisor, Center for Career Development and have a degree completion plan.

Prerequisite: EXED 090, Building Your Professional Image; zero or one credit hour, Pass/Fail, Does not count toward graduation.

UE Course: COOP 091 for students enrolled in all Colleges and Schools; may be repeated. Zero or one credit hour.

Concurrentco-opis a paid educationalemploymentexperience, typically 8-20 hours of work per week for usually a minimum of 12 weeks. Concurrent co-op is available for students enrolled full time, in at least 12 credit hours. May be taken only in the fall and spring.

Prerequisite: EXED 090, Building Your Professional Image; zero or one credit hour, Pass/Fail, Does not count toward graduation.

UE Courses: College of Engineering and Computer Science ENGR 081, one credit hour, does not count toward graduation, Pass/Fail.

All other students: EXED 072, one credit hour, Pass/Fail.

## Traditional Co-op

This co-op plan combines classroom education with full-time professional work experience and provides students with opportunities for earning a part of their University expenses. Through the co-op program,studentsareofferedavarietyofprofessionalexperiences,rangingfromassistingtechnicalstaffmemberstoindependent researchanddevelopment.Uponsatisfactorycompletionoftheprogram, thestudentisdesignatedaco-opgraduateandawardedaco-op certificate at the time of graduation.

Under the traditional co-op plan, the student spends alternate or consecutive academic semesters working full time for the co-op employer and studying as a full-time student. Normally, a co-op student is able to earn a bachelor's degree and work four semesters overa period offive calendaryears, providedthestudentfollows the prescribedscheduleforworkandschoolshowninthefollowing plan (may vary depending on the major program and year in school).

Schedule One

|  | Fall | Spring | Summer |
| :--- | :--- | :--- | :--- |
| First Year | School | School |  |
| Second <br> Year | School + <br> EXED 090 or | School + <br> EXED 090 | Work <br> Rotation 1 |
| Third Year | School | Work Rotation 2 | Work/School/ <br> Open |
| Fourth <br> Year | Work Rotation 3 | School | Work <br> Rotation 4 |
| Fifth Year | School | School |  |

A second option in the Traditional Program is the 3 or 4 semester consecutive rotations schedule. In this plan, a student would finish at least three semesters of full-time coursework at the University of Evansville prior to beginning their work period.

Schedule Two

|  | Fall | Spring | Summer |
| :--- | :--- | :--- | :--- |
| First Year | School | School |  |
| Second Year | School <br> EXED 090 | Begin Rotation 1 | Compete <br> Rotation 2 |
| Third Year | Complete <br> Rotation 3 | School | Internship/ <br> School/Open |
| Fourth Year | School | School | Internship/ <br> School/Open |
| Fifth Year | School | School |  |

Thissamepatternmaybeappliedaftercompletingfour,fiveorsix semesters of full time academic coursework.

## Concurrent Co-op

Noteverystudenthastheopportunitytolocateatraditionalco-op position providing professional full-time experience. Many opportunities exist in Southwest Indiana that provide critical hands-on experienceforawidevariety ofcareersinapart-timerole. Numerous employers have long-standing relationships hiring students in professional and paraprofessional capacities for their small businesses, nonprofits and global corporations. Students possess in-demand skillssuchascomputerknowledge,creativity,businessfundamentals, social media savvy, communication and customer service coupled withflexibleschedules and professionalenergy. Aconcurrentco-op is a viable option for most majors and provides a way to connectacademics to practical training. Careers associated with local part-time paid positions include:engineering, computer science, information technology,marketing, graphic design, communication, media, religion, management,accounting,finance, writing, modeling, analysis, education,health careandhumanservices. Whenneeded, theCenter forCareerDevelopmentwillfacilitatetheconcurrentco-opprogram forstudentswithexistingpart-timepositionsthatqualifyandsupport others in their search for a suitable opportunity. The concurrent co-op program is a simple and direct way to link professional parttimeemployment with curriculum and allow the student to earnthe University's Co-op Certificate.

## General Information

Studentsmustsatisfythesamecourserequirementswhetherthey pursuetheregularfour-yearstudyplanorthefive-yearco-opplan.All studentsparticipatingintheco-opprogramshouldconsultwiththeir academicadvisorspriortoacceptingaco-opjoboffer.Toavoidcourse scheduling problems that would likely cause a delay in theexpected dateofgraduation, thestudentandadvisorshoulddevelopandmap an academic advising plan that takes into account the choice of cooperativeeducationfortheremainderofthestudent'seducational program. Students may delay entering the co-op program from the second summertothethird spring semester provided that they plan to complete the program.

Applicationforadmissiontotheco-opprogramisnormallymade duringthefallsemesterofthesecondyearafterenrollinginExperiential Education 090, which is a zero or one creditseminar managed by theCenterforCareerDevelopmentstaff.Tobeeligibleforadmission totheco-op program, astudentmusthave a cumulative grade point average of at least 2.25 for Engineering and Computer Science (2.50 for all other majors) based on at least three semesters of full-time study. In addition, the eligible applicant must have completed the equivalent of the first three semesters of their desired degree at the timeofthefirstworkperiodandgenerally completethreesemesters of work.

Someemployers requireU.S.citizenshiporpermanentresidence status. International students holding an For Jtype visa completing an experiential experience in the United States must abide by the requirementsstatedintheCPTGuidelinesandmustcoordinatethese activities with the UE Designated School Official (DSO). A copy of the CPT Guidelines may be obtained from the Center for Career Development'sWebsite:www.evansville.edu/careercenter.TheCenterforCareerDevelopment partners with Cultural Engagementand InternationalServices,advisorsandinternationalstudentstofacilitate their participation in the co-op program.

Transferstudents are invited to apply fortheco-op program after consulting with their academic advisor to ensure that co-op course schedules will permit satisfactory progress toward their desired degree.Transferstudentsmustsatisfactorily completeonesemester of full time course work at the University of Evansville and meet all
other guidelines/requirements.
The Center for Career Development staff will seek to identify suitable employment for all eligible applicants. However, final admission to the program is governed by the availability ofjobs, and employment in the program cannot be guaranteed. Normally a student is eligibleforco-opjob commitmentonly onceandis expected to remain employed by the initial co-opemployer until the program iscompleted.Ifthestudentrequestsachangeofemployer, theSenior Director or designee will review the merits of the request and grant it athis orher discretion. Additional requestsforchange ofemployer will normally be denied and may necessitate additional fees.

Studentsadmittedtotheco-opprogrammustberegularlyenrolled each semester in either full-time studies at UE and/or in the appropriate Cooperative Education course. A cumulative GPA of at least 2.25 must be maintained to continue in the program. A co-op fee is charged for enrollment in the Traditional Program, Cooperative Education 091 forthefirstthree roatations andmustbe paid inaccordancewiththeUniversity'sstandardscheduleforpaymentoftuition andfees.Co-opfeesareusedtohelpoffsetthecostsofadministering the program. There is no cost for enrollment in Concurrent Co-op, as long as a student is enrolled as a full time student with 12-18 hours of credit.

Duringtheirco-opemployment,studentsareregularemployees of the companyandare paidat a rate commensurate with thetypeof workthey are doing withinthat company's compensation schedule. Co-opstudents aregivenassignments ofincreasing complexityand responsibility as they demonstrate their capability for progression. The student's performance is regularly reviewed by the employer and the Center for Career Development staff with the assistance of thestudent'sacademicadvisor. Thestudentis expected to maintain communication with the Center for Career Development and their academic advisor while they are enrolled in the co-op program.

Employersparticipatingintheco-opprogramarelocatedthrough-outthenationandincludelargeglobalcompanies,smallerlocalcompanies, publicutilities, governmentagencies, nonprofits, healthcare, and laboratories. Given marketplace limits, effort is made to meet each student's preferenceforemployerandjoblocation. Newco-op firms are often added based on student interest.

Studentsinterestedin participating in theco-opprogramshould meet directly with their academic advisor or department chair prior to scheduling a meeting with the Center for Career Development.

## Engineering Internship

The University of Evansville College of Engineering and Computer Science Internship Program is managed by the Center for CareerDevelopment.Itis apaideducationalexperience,30-40hours ofworkperweekforaminimumof8weeksandusuallyavailableonly duringsummersessions. Studentsenrolledinan EngineeringInternshipmusthaveearnedatleast 18earnedcredithoursattheUniversity of Evansville, with at least nine hours of cumulative progress toward adegreeintheCollegeofEngineeringandComputerScienceduring theprevioustwoacademicterms.Studentsmustbeingoodacademic standing with a cumulative GPA of at least 2.25. Transfer students should consult with their academic advisor or department chair to ensure that course schedules will permit participation. Transfer students shouldsatisfactorily completeone semesteroffulltimecourse work at the University of Evansville and meet all other guidelines/ requirements.Specificacademicrequirementsincludedevelopingat leastthreemeasurablelearningobjectives,self/employerevaluation and reflective writing. The position description and potential learning objectives require prior approval by the Senior Director of the Center for Career Development or designee.

Prerequisite: EXED 090, Building Your Professional Image; zero to one credit hour, Pass/Fail.

UE Course: College of Engineering and Computer Science: ENGR 071, Zero Credit, Pass/Fail, May be repeated.

## Experiential Education EXED

## Internship

EXED 071 is a noncredit internship option open to students enrolled in: College of Arts and Sciences, School of Business Administration, College of Education and Health Sciences and Center for Adult Education. It is a paid or unpaid, full or part-time experience for a period of 8-16 weeks in a professional or paraprofessional role associated with a student's majo or career interest, requiring a minimum of 50 accumulated workhours per session. Specific academic requirements include but are not limited to developing at least threemeasurablelearningobjectives,self/employerevaluationand reflective writing. The position description and potential learning objectives requirepriorapprovalbytheSeniorDirectoroftheCenter for Career Development or designee. May be repeated. EXED 071 wasdesignedasaninternshipoptionforstudentswhosescheduleor circumstances do not allow them to complete an internship in their major. It is meant to be a flexible option and not a substitute for departmental internships.

A student must be in good academic standing with a minimum GPA of 2.25, have earned at least 18 credit hours at the University of Evansville with at least nine hours of cumulative progress earned toward a degree in the College of Arts and Sciences, School of Business Administration or College of Education and Health Sciences during the previous two academic terms. Students in the Centerfor Adult Education must be enrolled in a Degree Program and have successfully completed one semester as a full-time student in their curriculum. Transfer students should consult with their academic advisorordepartmentchairtoensurethatcoursescheduleswill permitparticipation. Transferstudentsmustsatisfactorilycompleteone semester of full time course work at the University of Evansville and meet all other guidelines/requirements.

Prerequisite:Itishighlyrecommended that participants successfully complete EXED 090, Building Your Professional Image, prior to enrolling in this course.

Course: EXED 071, zero credit, Pass/Fail, May be repeated.

## Professional Preparation

EXED 090 Building Your Professional Image
The course is designed for students who will be completing an internship, co-op or other academically-related work experience. It focuses on self-knowledge and résumé development, professional communication and job search correspondence, mock interviews andinterviewing processes,culturalcommunicationcompetencies, etiquette,networkingandjobsearchtechniques. Thecoursecontent is delivered in an active learning environment.

EXED090 is recommended for allstudents whohave successfully completedoneormoreyearsofhighereducationand plantohavean experiential education experience within the next 12 months. This course was previously listed as COOP 090.

Course: EXED 090, may be taken for zero or one credit hour, pass/fail and does not count toward graduation. Goals

- Studentsdevelopself-understandinganddisciplinespecificprofessionalbusinesscommunication:résumés,coverletters,thank you cards, interviewing techniques, and oral presentations.
- Students improve their ability to connect and articulate their UE experiences with their career goals as they interface with the workforce.
- Studentspracticethemanystepsrequiredtopresentthemselves as educated, enthusiastic and competent professionals.
Thepurposes ofthiscourseareto preparestudentsindeveloping the skills and approaches to make informed and satisfying career decisions,conductaneffectiveandprofessionalco-op/internemployment search, and present themselves in a manner that emphasizes theprofessionalism, relevantskillsandbackground ofachosenfield.


## Harlaxton College and Other Study Abroad Programs

The University of Evansville maintains a strong commitment to internationalization. This commitment is shown in the emphasis on studying abroad for all students, and the ability for UE students to choose locations all over the world to earn credits towards degree completion and to learn to become global citizens.

TheOfficeofStudy Abroadalsoassistsstudentswith applications forvarious nationalscholarship programsinsupportofstudyabroad, including the Fulbright and Gilman Scholarships.

Students are welcome to study abroad through three different types of programs: Harlaxton College, Faculty Led Programs, International Exchanges, and Provider Programs. The Office of Study Abroad, located in SOBA, is available to help students explore these options and select the best fit for a student's field of study and personalgoals.Each oftheseprogramtypesareclearlyexplainedonour websiteandastudyabroadadvisorwillhelpyouthroughtheprocess of applying and preparing for your time abroad. Although students mustbeatleastsophomorestoparticipateinstudyabroad,planning should begin as early as the freshman year. Close consultation with the Office of Study Abroad and the student's academic advisor is essential.

1. Faculty-Led Programs

The University of Evansville offers a variety offaculty-led programs abroad, usually over Spring Break or the summer term. Locations and course topics change annually, with some programs running biennially. Trips typically range from one week to five weeks.

Interested students should look for information on the Study Abroadwebsitethroughouttheyearorcometotheofficetolearn moreaboutprogramsbeingoffered.Recentfacultyledtripshave included:

- Designing a marketing plan and then visiting a non-profit organization in Havana, Cuba
- Visiting and shadowing teachers in rural schools in Trinidad
- Participating in a Habitat for Humanity Build in Nicaragua
- Studying Biology in Costa Rica
- Studying Political Science in South Korea

2. Harlaxton College

HarlaxtonCollege,housedinanineteenth-centurymanorhouse, is situated in the EastMidlands,justoutsideGrantham, England, andonehournorth of London.Academic programs are rigorous yet personal as the British and American educational systems combine to produce a unique scholastic environment in which experientiallearning playsalargepart.Classesareoftencomplemented by field trips to enhance the classroom setting. All parts of the United Kingdom, as well as Paris, Rome, Florence, and Ireland, are common destinations for Harlaxton students.
HarlaxtonCollegeoperatesasemester-length programeachfall
and spring and a five-week summer session. Costs of the semes-ter-length Harlaxton program are comparabletocharges on the Evansville campus, and UE financial aid applies. Tuition for the summerprogramisidenticaltoEvansvillesummercoursetuition.
Thecenterpiece oftheHarlaxtonCollegecurriculumisasix-hour course in British studies, offering an interdisciplinary introduction to British life and culture. Literature, art history, economics, history, and political science are part of the course, which combines lectures, seminars, and travel. In addition, a wide range of humanities andsocialsciencecoursesareofferedeach semester to enable students to maintain normal progress in their respective academic programs. Approximately 30 courses are offered each semesterfrom which the studentmay selecttwo or threein addition to the British studies courses, which are required of all students. Courses are taught both by British faculty and visiting faculty from the United States.

## 3. Exchange and Provider Study Abroad Programs

In addition to studying for a semester or summer at Harlaxton College,University ofEvansvillestudentscanchoosefromawide variety of programsinotherlocationsaroundtheworld.Students approved on these programs can typically use their UE financial aid packages during the fall and spring, and the Office of Study Abroad will work to find a program that fits individual interests, goals, and academic requirements.

## Major Discovery Program for Undeclared Students

StudentswhohavenotdeclaredamajoruponenteringtheUniversityofEvansvillehavethefreedomtoexplorevariousdisciplineswhile meetingtheirgeneraleducationrequirements.TheMajorDiscovery Program is specifically designed to assist incoming freshmen and transferstudentsinthediscoveryofanacademicareaorareasofstudy in whichtomajor.Theprogramencouragesexploration ofacademic majors, self-discovery, and participation in cocurricular activities offered by the University. Undeclared students are encouraged to take Discussion 100, Journeys and Discoveries, a one-credit course designedtohelpthemmakewiseandthoughtfulchoicesabouttheir future through participation in readings, discussions, lectures, and activitiesthatguidetheirexplorationoftheUniversity, majorfields of study, and career opportunities.

Studentsareadvisedbyfacultymemberswhohaveaspecialunderstandingofthe varietyofopportunities availableattheUniversityand areawareofeventsthathelpstudentsconnecttocampusandtotheir future studies.

Major Discovery students have a broad range of interests and faculty encourage students to embark on academic explorations without pressuretodeclareamajorbeforetheyareready.Moreover, becauseundeclaredstudentsareoftenacademicallystrong,theyare notdiscouragedfromexploringdisciplinesbeyondtheintroductory level. Indeed, it may be useful to remember that at least 60 percent ofthestudentswhoentertheUniversitywithdeclaredmajorschange to another major at least once. Students who enroll in the Major Discovery Programareencouragedtofindamajorbytheendoftheir freshman year to ensure on-time graduation, but are not pressured tomakeadecisionbeforethey haveexploredeverypossibleoutcome that interests them.

## ROTC - Army Reserves Officers' Training Corps

The Army Reserves Officers' Training Corps (ROTC) is available to UE students. Qualifying students are eligible for up to full tuition, merit-basedscholarships,andotherfinancialassistancethroughthe US Army.ROTC provides hands-on leadership developmentinaddition to regular college courses. Typically students take two Military Science Level (MSL) ROTC courses each year, one each semester. Course descriptions are listed in the back of the catalog under the undergraduate course descriptions section, under MSL. UE cadets meet with cadets from University of Southern Indiana to conduct weekly physical training. These sessions include cardiovascular fitness, muscular strength, and muscular endurance training. Physical training sessions and courses may beheld at USI oratUE, dependent upon enrollment numbers.

To learn more about ROTC scholarships and admission to the program, go to Armyrotc.com. For specific information about UE's ROTC program, please see the UE Office of Veterans Affairs web page at evansville.edu/veteransaffairs/rotc.cfm, or contact:

ROTC Scholarship/Enrollment Counselor
University of Evansville ROTC
812-461-5304
Office of Veterans Affairs
800-423-8633, ext. 2141, or 812-488-2141
Email: cl29@evansville.edu

## Academic Policies and Procedures

Students are responsible for familiarizing themselves with the portionsofthiscatalogpertaining totheircourseofstudy, University requirements,requirementsfortheirmajor,academicpolicies,regulations,and procedures.Studentsshouldseekregularassistancefrom theiracademicadvisorsthroughouttheircourseofstudy;however, the studentisultimatelyliableforkeepingup with programchangesand for meeting all requirements.

The University reserves the right to change the fees, rules, and calendarsregulatingadmissionandregistration,tochangeregulations concerninginstruction in and graduation fromtheUniversityandits variousacademicunits, to withdrawcourses, andtochangeanyother regulationaffecting the studentbody. Information inthis catalog is not toberegardedasabindingcontractbetweenthestudentandtheschool.

The University also reserves the right to deny admission to any applicant,todismissastudentwhenformalacademicactionistaken by the Admissions and Standards Committee, to discontinue the enrollment of any student when personal actions are detrimental to the University community, or to request withdrawal of a student whose continuance in the University would be detrimental to his or her health or to the health and safety of others.

## Academic Honor Code

In its mission, the University clearly states its intention to be val-ue-orientedinallendeavors.TheAcademicHonorCodewascreated by the University community, students andfaculty alike, to create an atmosphere conducive to this high ideal and to academic integrity.

The primary purpose of the Academic Honor Code is to enable students and faculty to conduct their academic duties in an atmosphere offreedom. This is an ideal that requires the commitment of both students and faculty. Members of the faculty affirm a commitment to the Academic Honor Code by defining clearly what is or is not unauthorized aid. Student commitment to the Academic Honor Code is implied by his or her matriculation at the University of Evansville. The code, which follows, is appropriate for all academic work that is to be submitted for credit.

IunderstandthatanyworkIsubmitforcoursecreditwillimplythat| haveadheredtothisAcademicHonorCode:Iwillneithergivenorreceive unauthorizedaid, norwillItolerateanenvironmentthatcondonesthe use of unauthorized aid.

Commitment to the University of Evansville Honor Code is a condition ofmatriculationattheUniversity.Underthehonorsystem, facultymembersoftenusehonor-basedtestingdevices,suchastakehome exams and examinations without a proctor. Each instructor is obligatedtodefineunauthorizedaidclearlyasitrelatestoassignments within his or her specific course(s). Instructors should discuss the importance of academic integrity, review related items in the syllabus, and clarify the definitions of cheating and plagiarism. When in doubt, the student is obligated to obtain an understanding of the instructor'suseoftheterm.Ignoranceisnotacceptedasavalidexcuse for a violation of the Academic Honor Code.

Thenon-tolerationclause("norwillItolerateanenvironmentthat condones the use of unauthorized aid") is integral to the Academic Honor Codeas the honor system relies on the active participation of all students.Each student, therefore, is responsibleforhisorherown personalhonorandtheacademicintegrityoftheUniversity community.Theacademichonorsystemfunctionsonlywhenstudentsvalue their personal honor and that of the community enough to guard it. This is not to say that students must constantly watch for violations; however,itisthestudent's responsibilitytoupholdtheintegrityofthe

Academic Honor Code. Any observations or knowledge of misconduct should be reported immediately.

The honor system and the implementation of its procedures fall undertheadministrativejurisdiction ofthefacultyandthepresident. The Office of the Dean of Students keeps records of violations and hearingsandmaybeconsultedbytheHonorCouncilchairregarding procedures and past violations.

For more information about the Academic Honor Code and procedures, please reference the Student Handbook.

## Academic Advising

TheUniversity ofEvansvilleemphasizesthedevelopmentofindividual initiative, responsibility, and self-discipline by students in the planning oftheirowneducational programs. Theacademicadvising systemisdesignedtoassiststudentsinthedevelopmentofeducational plansand careergoalsandtoteachthemtheskillsnecessaryto pursue those goals. In both academic and career areas, planning is a developmentprocesstobefosteredduring theentireperiodofastudent's involvement with the University.

Faculty advisors, with the support of the Center for Academic Advisingworkcloselywithstudentstohelpthemdevelopintelligent, responsible self-management.

## Freshman Advising Program

The Freshman Advising Program provides guidance from the moment a student enters the University. Assigned faculty advisors whoarefamiliarwiththestudents'academicpreparationandareas of interestofferfreshmennotonlydirection inthechoiceofcoursesbut alsoinsightintothenatureandimportanceofauniversityeducation. Facultyadvisorshelptoplanincomingstudents'academicprograms on the basis of their backgrounds, abilities, interests, and goals.

When a freshman indicates an area of interestor a major, an advisor is assigned on the basis of academic specialty. For freshmen with wide-ranginginterestswhoareundecidedaboutamajorfieldofstudy, advisorsespeciallyinterestedinworkingwithundeclaredstudentsare assigned, taking intoaccounteach student's stated areas of interest.

Whenever possible, a freshman's advisor willalso be one of his or herinstructors,ensuringthestudent'sopportunitytoseekhelpatanytime. This classroom contact also cultivates the advising and counseling relationshipbetweenstudents andfacultyadvisors.Students comfortablewithanadvisorthey havecometoknowasprofessorand friend find it easier to discuss not only which courses to take next termbutalsowhichacademicprogramsandcareerpathstoconsider.

## Transfer Student Advising

Transfer students are assigned to faculty advisors according to their academic interests or intended majors. Advisors, aided by the Officeofthe Registrar,helptransferstudentsassessstandingtoward the degree in their chosen field of study and work with them in long-rangeacademicand career planning.Atranscriptevaluation is completed by the Office of the Registrar after official transcripts are submitted from previouscollegesthetransferstudentattended.It is advisablethatalltransferstudentsgooverthenecessarygraduation requirementswiththeirnewacademicadvisoruponmatriculatingto the University of Evansville.

## Academic Load Fall/Spring Semesters

Full-Time: A student enrolled in 12 or more hours per semester Part-Time: A student enrolled for fewer than 12 hours per semester

The normal load for a full-time undergraduate student is 12 to 16 hours of class and laboratory work per semester. If a student, in consultation with his or her academic advisor, elects to carry more than 16 hours, the grade point average should be a guide in determining the maximum number of hours to be attempted (exclusive of music ensemblesandexerciseandsportscienceactivitycourses).Therecommended load limits are:

Up to 1.99 GPA - 16 hour maximum
2.0 to 2.99 GPA - 18 hours maximum
3.0 to 4.0 GPA - 20 hours maximum

Overload:Becauseacademicperformancefrequentlysufferswhen an overload is taken, a student in good standing wishing to take 21 hours or more and a student on academic probation wishing to exceed 16 hours must petition the dean of his or her major's college forapprovalandhavethesupportoftheacademicadvisorindoingso.

Most academic failure results from insufficient study outside the classroom. If a student has a job or other non-academic activity requiring 20 or more hours each week, he or she is advised to carry a reducedacademicload.Studentsshouldallowsufficienttimeoutside the classroom for study (use the guideline of two hours of study for each hour spent in class) as an investment in academic success and their professional future.

## Class Attendance

The University is committed to the promotion of a sense of academiccommunityinwhichthestudentandinstructorjoininashared learningexperience.Thestudentandinstructoralikeassumerespon-sibilityforthegeneralwell-being oftheacademicprocess,eachhaving something to contribute to as well as to gain from a given course.

The University expects regular class attendance by all students and placestheresponsibilityonthestudent.Studentsareconsidered sufficientlymaturetoappreciatethenecessity ofregularandpunctual attendance, to accept this personal responsibility, and to accept the consequences of failure to attend. An instructor or academic unit mayrequireattendanceincoursesortypesofcourses.Instructorsare expected to maintain absence policies in keeping with the nature of theircoursesandmayconsiderattendanceinevaluatingperformance in their courses.

When an absence occurs due to an emergency ormedical condition, students are expected to notify their instructors of the absence prior to class or to seek the assistance ofthe Office ofthe Dean of Studentsinnotifyinginstructors. Thedeanofstudentshastheauthority toreviewand grantrequests,ifappropriate,forexcusedabsencesfor documentedmedical, psychological,orpersonalreasons, including observation of religious holidays.

## Classification of Students

Students are classified on the following basis:
Senior: 90+ credit hours earned
Junior: 60-89.9 credit hours earned
Sophomore: 30-59.9 credit hours earned
Freshman: 0-30 credit hours earned

## Registration Procedures

## Eligibility for Course Registration

A student must confer with his or her advisor and secure the advisor's approval for all course registrations or changes of registration. Registration for continuing students will take place during the preceding regularsemesteraccording to theschedule published by the Office of the Registrar. Registration for new students will be held duringspecialorientationandregistration periodsorontheopening days of a term as designated by the University calendar.

Ingeneral, coursesarenumberedtosuggesttheappropriatelevel of eligible enrollment by students:

0-99 Non-credit
100-199 Freshman Level
200-299 Sophomore Level
300-399 Junior Level
400-499 Senior Level
500-799 Graduate Level
Exceptionstotheundergraduateenrollmenteligibilityguidemay bemadebytheadvisoriftherearenootherprerequisitestoenrollment.

Cancellation of Registration
Cancellation of enrollment is permitted prior to the first day of class. The Office of the Dean of Students must be notified. Students who cancel their enrollment by this deadline will be given a full refund for tuition and room and board.

## Change of Registration

The student is held responsiblefor each course in which he or she officially registers. Onceenrolled, studentsmaychangetheircourse schedule by dropping or adding one or more, but not all, courses. After the first week of classes, an official drop/add form must be filed in the Office of the Registrar with the signature of the academic advisor and the instructor.

Dropping a Course
A course may be dropped without a designated grade through the last day to register or add a course (see the academic calendarfor exact dates). From that date through the 11th week, a grade of W is assigned. After the 11th week, a grade of $F$ is assigned. Discontinuance of attendance does not automatically constitute a withdrawal. Students failing to file a proper drop/add form by the appropriate deadlinemustcompleteclassesforwhichtheyareregisteredorreceive a grade of $F$.

## Independent Study

Thepurposeofindependentstudyistoprovidestudentsanopportunity to pursue in detail special topics or projects within the disciplinewhensuchtopicsarenotsufficientlycoveredinexistingcourses. Normally, such enrollment is restricted to the regular academic year. The student shall be registered for independent study credit in the semesterduringwhichthemajorityoftheworkisdone.Independent studyisnottobeusedasasubstituteforregularlyscheduledacademic offerings except in rare special circumstances, which will be defined by each academic unit. In such cases, the student and sponsoring instructormustsubmittheapproved proposalforindependentstudy formexplainingwhythecoursemustbetakenasanindependentstudy. Tuitionforindependentstudyischargedatundergraduatetuitionrates.

## Auditing Courses

Whenspaceisavailableaftertheregistration ofregularlyenrolled students, others may request permission of the instructor and the Office of the Registrar to enter a lecture course as auditors. An audi-
torissubjecttoattendanceregulationsandotherconditionsimposed by the instructor. The audit status for a course must be declared by the last day established for course additions. Laboratory sections of lecture courses, clinical experience in nursing and health sciences, internships and field experience throughout the University, and cohort degree programs are excluded from this policy.

Audit courses are not included in determining full-time enrollment status are not graded, and do not apply towards graduation requirements.Anauditcoursemaynotbechangedtoacreditcourse under any circumstances, which precludes a student attempting to earn credit by departmental or CLEP examination at a later date for a class previouslyaudited.Creditcourses maynotbechangedtoaudit courses. Thetuitionchargedforauditclasses is the sameasforcredit.

## Undergraduates Taking Graduate-level Courses

Undergraduatestudents with 90 credits or more may registerfor graduatecreditcourseworkwiththeconsentofthestudent'sadvisor and the department offering the course. Students may not enroll in more than 6 graduate credits per semester. For students taking graduate coursework, the total course load each semester, graduate and undergraduate, must not exceed 18 credit hours. No more than 12 graduate credits total can be permitted to count toward the undergraduatedegree.Graduatecourseworkmayapplytowardthe undergraduate degree with the approval of the departmentchair of the student's major.

## Summer School Registration

Students are limited to a maximum enrollment of three courses (maximum 10 credit hours) during a single summer regardless of the number of sessions or universities attended. Students who wish to take more than 10 credits must have a 2.0 minimum cumulative GPA, submit a petition to the dean of his or her major's college for approval, and have the support of the academic advisor in doing so. Students planning to take courses at another institution must have written approval ona transfercredit requestform signedinadvance by the student's academic advisor and the registrar.

## Withdrawal from the University

A student who finds it necessary to withdraw from all credit courses must apply for formal withdrawal through the Office of the Dean of Students. This process requires the completion of a University withdrawal form, an exit interview and, for students under the age of 18, parental permission. Final approval is subject to clearance from the Office of Student Financial Services. If this procedure is not followed, grades of F will be assigned.

Aftertheofficiallastdatetowithdraw(seetheacademiccalendar), approval for withdrawal from the University without grade penalty will be given for only one of two reasons: medical or psychological problems. A letter from a doctor or psychologist is required.

Failuretocompletetheterm does notcancelthestudent'sobligation to pay tuition and all other charges in full. For specific details regardingrefunds andadjustments,refertothesectionontuitionand fees in this catalog.

## Credit from Other Institutions, Advanced Placement, CLEP, International Baccalaureate, and by Examination

## Transfer Credit

The University of Evansville evaluates and may accept credit earned at other regionally accredited educational institutions. The
majority ofcredithours requiredforaUniversity ofEvansvilledegree must beearned froma bachelor's degree program. No more than 60 semester hours of credit fromajunior college or community college maybetransferredtotheUniversity, exceptin cases whereanarticulation agreement has been established.

At least 48 hours, including the last 15 hours and the majority of hours in the major, must be completed in residence to earn a baccalaureate degree from the University of Evansville, subject to the requirements of specific majors.

Once matriculated, a University of Evansville student may take nomorethanthreecourses (maximum 10 credithours) from another institution for transfer credit to be applied to his or her degree. Prior writtenapprovalfromthestudent'sacademicadvisorandtheregistrar via the transfer credit request form is required for each course the studenttakesfor transfercredit. Failure toobtain priorapprovalmay result in credits not transferring. The three course limit for transfer credit may not apply to students participating in an approved study abroad program not available through the University of Evansville.

Transfer credit is awarded only upon receipt of an official transcript sent directly to the UE registrar's office from the transfer institution. Each course is evaluated separately (except in cases of articulation agreements) to determine if it can apply toward a UE degree. The University reserves the right to accept or reject courses for transfer credit. Courses with a grade of D or lower and institutional exams will not be accepted for transfer credit. Grades are not transferred,onlycreditsaretransferred.Creditsfromotheraccredited educational institutions will not be posted to a student's transcript unless the credit applies to a student's degree program.

The University of Evansville has articulation agreements with Ivy Tech Community College of Indiana, Vincennes University, Kentucky Community and Technical College System, Henderson CommunityCollege, and OwensboroCommunityandTechnicalCollege.
Credit from Advanced Placement, CLEP, International Baccalaureate, and by Examination

The University of Evansville allows students to earn an unlimited number of hours of credit prior to entrance through the College Board Advanced Placement (AP) testing program, providing a grade of four or better in each examination has been achieved, and through the International Baccalaureate (IB) program, providing a grade of five or better in higher level subjects has beenachieved.Exceptionsmayapply. Contactthe Office oftheRegistrar for details.

Students may also obtain course credit by submitting the results of the College Entrance Examination Board's College Level Examination Program (CLEP) or by taking University of Evansville proficiency examinationsadministeredbyanacademicdepartment.The numberofhours ofcreditthatcanbecountedtoward thetotal hours required for graduation through CLEP or departmental credit by examination, however, is limited to two courses.

Departmental examinations in specific courses are available to qualified students upon approval of the academic advisor and the chairand/ordeanoftheacademicdepartmentinwhichtheexaminationistobetaken.Creditbyexaminationformsareavailablefromthe Office of the Registrar.A nonrefundable departmental examination fee will be charged (see tuition and fees section) by the Office ofStudentFinancialServices.Creditforthecoursewillbegranted provided the student passes the examination with a grade of C or better. No exam may be repeated if a grade lower than the equivalent of a C is earned. Agrade of Pis recorded on the transcriptforcreditearned by examination.

Studentsarenotpermittedtoscheduledepartmentalexaminations incoursesthathavebeenaudited, in courses in which unsatisfactory grades havebeenearned, orin coursesthat havebeendropped with agradeofW.Nocredittowardgraduationis awardedretrospectively tolowerlevelcourseworkbasedsolelyuponsatisfactorycompletion of more advanced course work in the same subject area except for academic sequence courses in foreign languages.

## Credit Hour Policy

The University of Evansville assigns credit on the basis of the semesterhour.UEhasestablishedacredithourpolicyconsistentwith theFederaldefinition ofacredithour.Asemestercredithourconsists ofoneclockhourofclassroomordirectfaculty instructionandamin-imumoftwohoursofout-of-classstudentworkeachweekforapproximately 15 weeks for one semester, or an equivalent amount of work throughlaboratory, practicum, internship, studio,orotheracademic activity.Thisequatesto45-75 hours ofacademicexperiencesforeach semestercredithour.Alternatively,coursesmaymeetthecredithour policy using a learning outcomestandard. This requires that thestudentdemonstrates,tothesatisfactionofthedepartmentawardingthe credit,evidenceofactualachievementofcourseobjectivesthatareat leastequaltotheintendedlearningoutcomesforacoursethatmeets the clock hour requirement described above.

## Grades

## Grading System

Attheconclusion ofeachsemesterstudents receivelettergrades indicating the adjudged quality of their work in each course. Grade points are assigned for each semester hour of credit as follows:

A Excellent 4.0
A- 3.7
B+ 3.3
B Good 3.0
B- 2.7
C+ 2.3
C Average 2.0
C- 1.7
D+ 1.3
D Poor 1.0
F Failure 0.0
FW Failure to complete 0.0
I Incomplete
NG No grade
P Pass
W Withdrew from course
All A, B, C, and D grades are passing grades. Grades of I, NG, P, orW are notincluded in computing grade point averages. Thegrade point average is thequotient resulting from dividing the total points earned by the number of hours attempted (including failure and excluding pass and incomplete).

## Midterm and End of Semester Grades

The University does not mail grades at the end of each semester. Students canaccesstheirgradesontheUniversity'sstudentinformation website. Midterm grades are not permanently recorded but are used bystudentsandtheiradvisorsforinformationandguidance.End ofsemestergrades become a part of the student's permanentrecord.

## Pass/Fail Option

A student may register for an elective course on a pass/fail basis. Theoptionisintendedtoencouragethestudenttoexplorenewacademic
areaswithoutendangeringthestudent'sgradepointaverageunlessthe grade earned is an F. Limitations on pass/fail registration are:

- Junior or senior status
- Only one course per semester may be taken pass/fail
- o course required for the major or minor and no course being used to meet a general education requirement may be taken pass/fail
- Pass/fail courses must be listed at the time of registration and must not extend beyond the approved academic load
- A course may not be changed from pass/fail, or vice versa, after the last day established for course additions
Courses offered only on a pass/fail basis are not subject to these regulations, except theymustnotextend beyond theapprovedacademic load.
Incomplete Grades
All course work is to be completed within the semester it is attempted.Ifanemergencypreventsastudentfromcompleting some portion of the required assignments, an instructor may give an I or incomplete grade only if the following circumstances are met:

1. The student's other work in the course would earn a passing grade.
2. The outstanding task can be completed without further class attendance.

Outstanding course work normally should be completed within six weeks of the class ending, but the instructor may allow up to one year from the end of the term for which the I grade is granted. It is thestudent'sresponsibilitytohavethisdeficiencyremovedwithinthe agreed-uponperiodorwithinoneyear, whicheverisless.(Registering for a course a second time does not remove an incomplete grade.) If theinstructorhasnotsubmittedagradechangeafterthegraceperiod, the registrar is authorized to change all grades of I to F.

## Repeating Courses

Any student who wishes to better the grade in a course taken at the University of Evansville may elect to repeat that course for grade improvement but must do so at UE. The cumulative grade point average (but not the semester grade point average) will reflect only thehighergradeearnedforaspecificcourse.Bothgradeswillremain on the transcript. Credit is awarded only once for the course unless otherwise indicated. Some courses may not be repeated; these are determined by the faculty of the appropriate academic unit of the University.

## Dean's List

To merit the honor of being placed on the Dean's List for a given semester,astudentmusthavecarriedafullacademicload of 12 hours or more, excluding pass/fail courses, and have earned a grade point average of 3.5 or above.
Grade Appeals
Any student who questions a course grade should speak to the instructor. If the instructor is unwilling to change the grade and the studentis notsatisfied withthereasonsgiven, thestudentmaycommence a formal appeal.

Anystudentwishingtocontestacoursegradeformallymustdoso in writing within 60 calendar days after the last day of the semester. Correspondence should be addressed to the instructor with a copy to the immediate supervisor. A change of grade will occur if both theinstructorandhisorherimmediatesupervisorapproveandboth sign a change of grade form, which is forwarded to the Office of the Registrar.

Ifeithertheinstructorortheimmediatesupervisordisapproves of thechangeofgrade,thestudenthastherighttoappeal totheAdmissions and Standards Committee within two weeks of receiving writtendisapproval.Ifthestudentreceivesnoresponsefromeitherparty within 30 calendar days of filing the appeal, the student may appeal directly to the Admissions and Standards Committee. Any appeal to the Admissions and Standards Committee must be filed during the semester (exclusive of summerterms) immediately following that in which the disputed grade was received.

WhenappealingtotheAdmissionsandStandardsCommittee,the studentmustsendacopy oftheappealtotheinstructorandimmediatesupervisor.Thestudent,theinstructor,andtheimmediate supervisorwillberequestedtoappearbeforethecommittee.Inexceptional circumstances, the committee mayallow other parties to attend the hearing to provide additional information. The committee chair will notify all parties of the decision.

Itisthestudent's responsibilitytoretainalldatedcorrespondence until the final decision is reached.

## Academic Standards

Graduation requires a minimum grade point average of 2.0 in both the major and the total program of study. Additional GPA requirementsmaybeimposedbyparticularprograms.TheUniversity reserves the right to dismiss at any time a student whose academic standing or progress is regarded as unsatisfactory.

## Academic Good Standing

Goodstandingreferstothenormalacademicprogressofstudents who are not on probation or on academic dismissal.

Cumulative grade point averages required for good standing: After the first semester - not less than 1.6
After completing 30 hours - not less than 1.9
After completing 60 hours or more - not less than 2.0

## Progress Toward Degree

All students enrolled for credit are expected to make regular and satisfactory progresstoward completion of a degree in a reasonable time. This is especially true for those students using financial aid grants or loans to meet the cost of education.

## Expectations

1. Allstudentsmustmaintainscholasticaveragesthatplacethem at or above good academic standing (see above).
2. Full-time students (i.e., any student enrolled in 12 or more hoursinonesemester) areexpectedtoaccumulateanaverage of 12 hours of credit for each semester (fall/spring) enrolled.
3. Part-timestudents (i.e., any studentenrolled for fewerthan 12 hourspersemester) areexpectedtoaccumulateaminimum of 24 hours of credit for each 30 semester hours enrolled.
Summer terms are not computed as regular semesters of enrollment; however, credit hours earned during the summer may be applied to degree requirements.

Satisfactory academic progress requirements for financial aid differ from those outlined above. The Office of Student Financial Services should be contacted for those guidelines (see page 9).

Academicgoodstanding (minimumandcumulative gradepoint averages) will be reviewed at the end of each semester (fall/spring).

## Academic Probation

Students will be placed on academic probation when they fail to maintaingoodacademicstanding, which requirescumulativegrade point averages as follows:

Hours of Credit GPA
Fewer than $30 \quad 1.6$
30-59.9 1.9
60 or more 2.0

## Academic Dismissal

Students who fail to remove probationary status for two consecutive semesters (exclusive of summerterms) may be dismissed from the University.

The University reserves the right to dismiss a student not making satisfactory progress toward a degree at the end of any semester in which minimum academic standards are not met.

As long as a student has not been dismissed from the University, classes may be taken during summer sessions to improve the cumulativegradepointaverageand/ortoaccumulateearnedhourstoward satisfactory progress. Transfer credit will only apply to accumulated earned hours and not the cumulative grade point average.

Students who have been academically dismissed from the University may not apply for readmission until at least one full semester (excludingsummerterms) has passed.Readmissions are considered on a case-by-case basis, and documentation must be provided indicatingconditionsfavorabletowardreadmissionandfutureacademic success.Recommendationsfromadvisorsshouldbeincludedwiththe petition. If a student takes courses at another university after being dismissed from UE, an official transcript with all grades must be includedinthepetitionforreadmission. Thepetitionforreadmission mustbefiledwiththeAdmissionsandStandardsCommitteethrough theCenterofAcademicAdvising.Allcompleteddocumentationmust besubmitted by December1 forspringsemester readmissionand by August 1 for fall semester readmission.

StudentsdismissedasecondtimebytheUniversitymaynotapply to be readmitted.

## Access to Education Records

The University of Evansville complies with the Family Education Rights and Privacy Act of 1974 (FERPA), as amended (Public Law 93-380), which is designed to protect the privacy of students by giving them rights concerning their education records. Education records include records directly related to a studentandmaintained by the University. Among other provisions, the act gives students (1) the right to inspect their records, (2) the right to challenge incorrect information in those records, and (3) the right to keep their records private. Students attending the University will be notified of their FERPA rights annually in the Student Handbook. Each University officemaintainingeducationalrecordsmustimplementthispolicyby appropriate means.

FERPA further provides that certain information about the student, designated as directory information, may be released by the University unless the student has informed the University in writing that such information may not be released. The following is considered directory information: name, home address, local address, telephone listings, major field of study, full-time or part-time status, participationin officiallyrecognizedactivities(inathletics, theweight andheightofmembersofathleticteams), dates ofattendance, degrees earned, awards received, photographs, and most recent previous school attended.

Astudentwhodesiresthattheabove-listeddirectoryinformation not be released must inform the Office of the Registrar in writing within one week of the beginning of each semester each academic year. Students may rescind their request in writing at the Office of the Registrar. While the University will honor a student's request to withhold directory information, it cannot assume responsibility to contactthestudentforsubsequentpermissiontoreleasesuchinformation.Regardlessoftheeffectuponthestudent,theUniversityassumes noliability as a consequence of honoring instructions that directory information be withheld.

Also, it is the student's responsibility to seek correction for any apparenterrorsinendofsemestergrades.Failureonthestudent's part toseekcorrectionwithinareasonableperiodindicatesthatrecordsare accurate as stated.

Effective as of 2012, certain agencies of the federal government mayaccessandreleasestudents'recordswithouttheirconsenttoany third party designated by a federal or state authority to evaluate a federal or state supported education program orto researchers performing certain types of studies.

## Transcript of Academic Record

Studentsmayobtainacertifiedstatementoftheiracademicrecord from the Office ofthe Registrarupon written request with signature. There will be a fee charged for each request. Transcript requests will beprocessedwithinfiveworkingdays.Transcriptswillnotbereleased ifthestudenthas anunpaidfinancialobligationtotheUniversityorif there is an unresolved disciplinary action against the student.

## Graduation

Upon the recommendation ofthefaculty and the approval ofthe Board of Trustees, the University of Evansville confers its academic degrees. Only those candidates who have fulfilled all scholastic requirements for a degree and who have met their financial obligationstotheUniversity will berecommendedforthedegree.Degrees are conferred five times a year at the end of the following terms: fall semester,winterintersession,springsemester,firstsummerterm, and second summer term.

## Application for a Degree

A candidate for a degree must file an application for the degree in the Office of the Registrar one year prior to the intended date of graduation. Whilethe registrarwill conducta degreeauditon behalf of the University, it is the student's responsibility to ensure that all graduation requirements are met.
Graduation under a Particular Catalog
University policy allows a student seven years to graduate under the catalog in effectat the time of initial enrollment at the University of Evansville unless the student is readmitted after a one-calen-dar-yearormorebreakinattendance.Studentswhoarereadmittedto theUniversityafteraone-yearormoreabsencewillfollowthecatalog in effect at the time of their re-entry.

Studentswhoarepursuingtwo(ormore)degreessimultaneously or who wish to earn an additional degree (see "Requirements for an Additional Degree") after completing the first may follow the same catalog as for the first degree if (a) no more than seven years have elapsed since their initial enrollment at the University and (b) there has not been an absence from the University of more than one academic year.

This policy does not apply to students initially admitted to parttimeacademic programs. Studentsadmitted to part-time academic programs should consult with the Office of the Registrar for applicable policies.

## Candidate Clearance

The University will be responsible for including on the list of graduatesonlythosestudentswhohavesubmittedtheapplicationfor degreeandhavemetallacademicrequirementsandallfinancialobligations. Deficiencies in academic requirements, such as incomplete grades and course substitutions, must be cleared no later than two weeks prior to the expected date of graduation.
Graduation with Honors
Bachelordegreecandidateswhohavemaintainedtheirscholastic standingatahighlevel willgraduatewithhonors.Studentsacquiring a grade point average of 3.85 will receive their degrees summa cum laude; students acquiring a grade point average of 3.70 will receive theirdegreesmagnacumlaude;andstudentsacquiringagradepoint average of 3.50 will receive their degrees cum laude. Only grades earned at UE are included in the calculation. Students must earn at least the minimum number of hours to comply with the University's residency requirement in order to be eligible for honors.

## Commencement

Commencement exercises are held annually in May and December.Studentscompleting degreerequirementsinthespringsemester andfollowingsummersessionsmayparticipateintheMayceremony. TheDecemberceremonyisforstudentscompletingdegreerequirements in the fall semester.

## William L. Ridgway College of Arts and Sciences

Ray Lutgring, Dean
The William L. Ridgway College of Arts and Sciences provides quality liberal education in the arts, humanities, and natural and social sciences, as well as professional training in the fine and performing arts. While baccalaureate degree work includes studies in fundamental disciplines and applied specializations, thesearecomplementarytotheoverall goals of individual intellectual growth and cultural development through broad study of the nature of humans and the universe.

The college offers baccalaureate degrees in archaeology, art history, art (art education, pre-art therapy, studio art, visual communication design), biology, biochemistry, chemistry, classical studies, cognitive science, communication (advertising and public relations, journalism, organizational communication, multimedia production, sportcommunication),creativewriting,criminaljustice,environmental science,environmentaladministration,foreignlanguagesandcultures (French, German, Spanish), history, interdisciplinary studies, international studies, legalstudies, literature, mathematics, music (music education,musicmanagement,music performance,musictherapy), neuroscience,philosophy,physics,politicalscience,psychology,religion, sociology(anthropology,gerontology,pre-socialwork),theatre(theatre designandtechnology,theatreeducation,theatremanagement,theatre performance), and writing.

Many preprofessional programs, minors, and concentrations are offeredinmost ofthe baccalaureatefields,asare,Latin American, and Russianstudies, and genderandwomen's studies. In conjunction with theCollege ofEducation and HealthSciences, the college offers bachelor degrees in senior high, junior high, and middle school education with teaching majors in English, language arts, mathematics, music, science, social studies, theatre, and visual arts.

Degrees granted in the College of Arts and Sciences are awarded uponsuccessfulcompletion ofallUniversityrequirementsandthose of specific departments and degree programs. Major requirements areoutlined withineach section describing the academic discipline. Students are required to consult with their faculty advisors before completing class schedules.

## iBACE: Integrating Business and Career Education

The iBACE program is designed to provide students in the William L. Ridgway College of Arts and Sciences and the College of Education and HealthSciences witheducational and hands-on business experiencesthat willimprovetheir marketability and career success. The program exposes students to business skills that they can apply in the workplace and builds upon foundational knowledge in their educationaldisciplinesbyaddingthosemarketing,management,and finance skills essential for careers in a variety of fields. This program isdesignedtopreparestudentsforcurrentandfuturebusinesstrends in the professional workplace.

## Course Work

The iBACE program contains three areas: coursework, a practical work experience, and a seminar for students seeking an internship. Theprogram requiresninecredithoursofcourseworkprovidingthree building blocks of business training: Accounting 210, Marketing 325, andManagement377.Studentsmustbeatleastsophomorestotakethe accounting courseandjuniorstoenrollinthemarketing andmanagement courses. iBACE students are also strongly encouraged to add at leastonecoursefromthoseofferedinHealthServices Administration.

Professional Preparation
Students must enroll in EXED 090, Building a Professional Image, prior to completion of their internship. This is a 7 week 0 or 1 credit hour course offered through Career Services for students seeking an internship orco-op program. This seminar course covers jobinterviewingskills,résumépreparation,currentlyavailableinternships and details of program administration.
Internship
In addition to any internship, practicum, or clinical experiences in your program of study, iBACE students will complete an additional internshipthatfocusesonbusinessaspectsofhealthcare.Toearnthree credithours,studentsmustcomplete 150 hoursofworkexperience.The business courses should be completed prior to the internship so that business principles can be applied to the professional experience. An internship in the student's major discipline is preferred.

## Application

Interestedstudentsshouldcompleteanapplicationformtoenroll in the program. The enrollment form can be found online at ibace. evansville.edu.Acertificate will beawardedatthe completion of the program.

## Archaeology and Art History

Faculty: Ebeling, Kaiser (Chair), Strobel, Thomas

## Bachelor of Arts <br> with a Major in Archaeology

## Bachelor of Arts with a Major in Art History

## Archaeology

The major in archaeology concentrates on providing students with an introduction to the discipline of archaeology and to the civilizations of the ancient Mediterranean area, the Near East, and Western Europe. It is intended to engage students in a broad-based, interdisciplinary approach that will notonly provide a firm foundation forthose wishing to pursue the discipline further at the graduate level but also serve as a liberal arts core for undergraduates planning careers in professional areas such as law or library science.

Majorsareencouragedto spendatleastonesemesterabroad,eitheratHarlaxtonCollegeor at a program directly related to Mediterranean archaeology (e.g., College Year in Athens or the IntercollegiateCenter for Classical Studies in Rome). Harlaxton College is located in an area rich with remains of the Roman civilization in Britain. It is possible to spend a semester in England or eventopursuestudy-abroadforanentireyearandstillcompletealldegreerequirementswithin fouryears.Studentsareencouragedtoparticipateinanarchaeologicalfieldschool.Inadditionto itsownfieldmethodsclass,thedepartmentsponsorsanexcavationatthesite of Jezreelinlsrael; studentsmayparticipateinotherexcavation practicaaswell.Thedepartmentcontributestoan interdisciplinary major in classical studies, which is described in its own section of this catalog.

Archaeology Minor (18 hours)
Archaeology 105,106;anytwo300-levelarchaeologycourses;one400-levelarchaeologycourse; History 311 or 312 or Interdisciplinary 325

## Art History

Thearthistorymajoroffersabaccalaureatedegreeaspreparationforgraduatestudyinarthistory orforcareers relatedtothevisualarts, aswellas providing anexcellentliberalartseducation. The program is international in scope, offering study at the Evansville campus and Harlaxton College.Studyabroadmayalsobepursuedthroughinstitutionally-approved programsinconsultation with the Office of Study Abroad. Internships in major art institutions are recommended. The program offers an emphasis in ancient art and archaeology, Renaissance, Baroque, eighteenth, nineteenth, andtwentieth centuryart, withhands-onexperienceinmuseumcollections. Students are encouraged to begin their course of study with surveys of art (Art History 208 and 209)toestablishabasisformoreadvancedcourses.Independentstudyandseminarclassesarealso available to permit individual research projects supervised by a member of the faculty.

Art History Minor (18 hours)
Aminorinarthistoryisrecommendedforstudentsmajoring inanthropology, archaeology,communication, English, history, international business, international studies, languages, nursing, philosophy, political science, religion,orinanyareaofstudywhereabroadknowledgeofWestern culture is essential.

Art History 208, 209, 389; one from Archaeology 206, 207, 305, 306, 307, 308, 309, or 311; one from Art History H383, 384, or 385; one from Art History H378, H379, 386, or H387

## Bachelor of Arts

## ARCHAEOLOGY

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (47

 hours)Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core, Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
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Outcome 6: (12 hrs) Linguistic and Cultural Competence in Lan-

## guage

Complete courses or proficiency through the 212 level.
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Outcome 7: (3 hrs) Quantitative Literacy
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Outcome 8: (7 hrs with at least one lab course) Scientific Literacy -
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (38 hours)
ARCH 105: Intro to Greek Archaeology (3 hrs)
ARCH 106: Intro to Roman Archaeology (3 hrs)
ARCH 192: Intro Archaeology Seminar (3 hrs)
ARCH 285: Technical Skills for Archaeologists II (3 hrs)
ENGR: 283: Technical Skills for Archaeologists (2 hrs)
Complete one course from:
ARCH 206: Intro to Near Eastern Archaeology (3 hrs)
ARCH 207: Intro to Egyptian Archaeology (3 hrs)
Complete one course from:
HIST 311: The Greeks and the East (3 hrs)
HIST 312: The Evolution of Rome (3 hrs)
ID 325: Alexander the Great (3 hrs)
Complete one course from:
ANTH 200: World Prehistory (3 hrs)
ARTH 208: Survey of Art I (3 hrs)
HIST 311: The Greeks and the East (3 hrs)
HIST 312: The Evolution of Rome (3 hrs)
HIST 313: Medieval Europe 410-1350 (3 hrs)
ID 250: Myths of the Greeks (3 hrs)
ID 325: Alexander the Great (3 hrs)
PHIL 211: Ancient Greek Philosophy (3 hrs)
Complete 9 hours from 300 level ARCH:
No more than 2 field practice (ARCH $340,394,395$ ) may count
toward this requirement.
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Complete 6 hours from 400 level Archaeology courses:
ARCH 400 may be counted toward this requirement, but majors may take any senior seminar; no more than one directed study (ARCH 493) or internship (ARTH 495) may be applied to the 400 level requirement.
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Free Electives 35 hours

39 Hours of 300/400 level courses

## Bachelor of Arts

## ART HISTORY

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core, Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
Complete courses or proficiency through the 212 level.
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Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy -
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness -

Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
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Overlays: Writing Across the Curriculum (4 courses)
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Major Requirements (36 hours)
ARTH 208: Survey of Art I (3 hrs)
ARTH 209: Survey of Art II (3 hrs)
ARTH 389: Twentieth Century Art (3 hrs)
HIST 111: World History to 1500 ( 3 hrs )
HIST 112: World History Since 1500 (3 hrs)
Complete one course from:
ART 210: Design (3 hrs)
ART 220: Drawing (3 hrs)
Complete one course from:
ARCH 305: Greek Painted Pottery (3 hrs)
ARCH 306: Greek Architecture (3 hrs)
ARCH 307: Roman Architecture (3 hrs)
ARCH 308: Greek and Roman Sculpture (3 hrs)
ARCH 309: The Etruscans (3 hrs)
ARCH 311: Archaeology of Syro-Palestine (3 hrs)
ARCH H383: Medieval Art (3 hrs)
Complete one course from:
ARTH H378: British Romantic Art (3 hrs)
ARTH H379: Art/Archaeology in Victorian Britain (3 hrs)
ARTH 384: Renaissance Art (3 hrs)
ARTH 385: Baroque Art (3 hrs)
ARTH 386: 18th and 19th Century Art (3 hrs)
ARTH H387: English Art/Archaeology to 1533 (3 hrs)
Complete 6 hours from 300 level ARTH or ARCH
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Complete 6 hours from 400 level ARTH or ARCH
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Free Electives (37 hours)

39 Hours of 300/400 level course

## Bachelor of Arts with a Major in Art

Bachelor of Fine Arts with a Major in Art

Bachelor of Science with a Major in Art Education

Bachelor of Science with a Major in Art and Associated Studies

Bachelor of Science with a<br>Pre-art Therapy Concentration

Bachelor of Science with a Major in Visual Communication Design

## Bachelor of Arts

The Bachelor of Arts degree with a major in art is offered to meet the needs of students interested in art as a discipline of study within a liberal studies education.

## Bachelor of Fine Arts

TheBachelorofFineArts degreewith amajorinartwithstudioarea concentrationsinceramics, painting, and sculpture prepares students for graduate study and to enter the professional field as artists, teachers, designers, and other related professions.
Portfolio and Admission Requirements
BFA students are required to hold a minimum GPA of 2.7 in studio core art courses and submit a portfolio of their creative work for review by a faculty committee which will determine if admission totheBFA programwillbegranted.Portfoliosshould be presentedfor review during thesemesterfollowing thestudent'scompletion ofthecorecurriculum. Aminimum of 18 hours in studio art and/or art history must be completed afterfull admission to the program and before graduation. Admission to the BFA degree program and graduation may not occur within the same academic year.
Graduation Requirements
Prior to graduation with a BFA degree, studio majors must meet the following requirements: Hold a minimum GPA of 2.7 in studio art courses, pass an exit review, and submit a display of their studio work for approval by an art faculty committee.

## Art Education

Successful completion of this degree qualifies students for teacher certification in Indiana and most other states.

## Art and Associated Studies

TheBachelorofSciencedegreewithamajorinartisdesignedforstudentswhowanttocombineageneralartmajorwithanassociatedfield ofstudysuchasarchaeology,arthistory,business, communication, history, psychology, or literature.

## Pre-art Therapy Concentration

The Bachelor of Science degree with a pre-art therapy concentration is designed to prepare students for a master's degree program in art therapy or to work in a related field.

## Visual Communication Design

The Bachelor of Science degree with a major in visual communication design is designed for students who wish to pursue a career in art with an emphasis in computer technology.

Studio Art Minor (20 hours)
The art (studio) minor is designed for students who desire a program of study for their own personal growth and enjoyment or for an adjunct to other major interests such as art history, archaeology, anthropology, business, communication, foreign languages and cultures, history, literature, philosophy, or religion.
Art 210, 220 or 221, 325; one course from Art 330, 340, 345; one course from Art 350, 360, 370; one course from Art History 208, 209; three hours in studio electives

Visual Communication Design Minor (18 hours)
Thevisualcommunicationdesignminorisdesignedforstudentswhoprefertosupplementtheir interest in computers as the artist's tool.

Art 210, 213, 220 or $221,315,316,410$ or 417

## Bachelor of Arts

## ART

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core, Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity -
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
Complete courses or proficiency through the 212 level.
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Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy -
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
.
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
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Overlays: Writing Across the Curriculum (4 courses)
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Major Requirements (36 hours)
ART 210: Design (3 hrs)
ART 220: Drawing (3 hrs)
ART 221: Drawing (3 hrs)
ART 325: Life Drawing (3 hrs)
ART 340: Painting (3 hrs)
ART 360: Ceramics (3 hrs)
ART 370: Sculpture (3 hrs)
Complete one course from:
ART 330: Printmaking (3 hrs)
ART 345: Watercolor (3 hrs)
ART 350: Metalwork/Jewelry (3 hrs)

Studio Art Electives
Complete 13 hours from the following
ART 315: Typography (3 hrs)
ART 316: Publication Design (3 hrs)
ART 325: Life Drawing (3 hrs)
ART 330: Printmaking (3 hrs)
ART 340: Painting (3 hrs)
ART 345: Watercolor (3 hrs)
ART 350: Metalwork/Jewelry (3 hrs)
ART 360: Ceramics (3 hrs)
ART 370: Sculpture (3 hrs)
ART 410: Portfolio Preparation (3 hrs)
ART 417: Advanced Imaging/lllustration (3 hrs)
Complete 6 hours from 300 level ARTH or ARCH
-
.

Free Electives (30 hours)

39 Hours of 300/400 level course

## Bachelor of Fine Arts

## ART

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements ( 47
hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar
Outcome 2: (3 hrs) Imaginative Expressions of Human Condition

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core, Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
Complete courses or proficiency through the 212 level.
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Outcome 7: (3 hrs) Quantitative Literacy
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Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlays: Writing Across the Curriculum (4 courses)
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| Major Requirements (70 hours) |
| :---: |
| ART 210: Design (3 hrs) |
| ART 220: Drawing (3 hrs) |
| ART 221: Drawing (3 hrs) |
| ART 325: Life Drawing (3 hrs) |
| ART 340: Painting (3 hrs) |
| ART 360: Ceramics (3 hrs) |
| ART 370: Sculpture (3 hrs) |
| ARTH 208: Survey of Art I (3 hrs) |
| ARTH 209: Survey of Art II (3 hrs) |
| ART 330: Printmaking (3 hrs) OR |
| ART 345: Watercolor (3 hrs) OR |
| ART 350: Metalwork/Jewelry (3 hrs) |
| Studio Areas:Complete 15hoursofrepeatablecoursesfromonespecialization area |
| Painting |
| ART 340: Painting (3 hrs) |
| ART 345: Watercolor (3 hrs) |
| Ceramics |
| ART 360: Ceramics (3 hrs) |
| Sculpture |
| ART 370: Sculpture (3 hrs) |
| Complete an additional 12 hours of courses from two studio areas other than the studio specialization. |
| ART 214: Basic Photography (3 hrs) |
| ART 314: Creative Photography (3 hrs) |
| ART 315: Typography (3 hrs) |
| ART 316: Publication Design (3 hrs) |
| ART 325: Life Drawing (3 hrs) |
| ART 330: Printmaking (3 hrs) |
| ART 350: Metalwork/Jewelry (3 hrs) |
| ART 360: Ceramics (3 hrs) |
| ART 370: Sculpture (3 hrs) |
| ART 410: Portfolio Preparation (3 hrs) |
| ART 417: Advanced Imaging/lllustration (3 hrs) |
| Complete 7 hours from ART electives to total 57 ART hours |
| Complete 6 hours from ARTH or ARCH |
| ree Electives (3 hours) |

39 Hours of 300/400 level courses

## Bachelor of Science

## ART EDUCATION

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
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Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy -
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
.
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
- 

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- Art 401: Art and Culture

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (81 hours)
PSYC 226: Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar (1 hr)
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School
(3 hrs)
ART 497: Methods of Teaching Art (3 hrs)
Art Education Requirements
ART 210: Design (3 hrs)
ART 213: Computer Graphics (3 hrs)
ART 220: Drawing (3 hrs)
ART 221: Drawing (3 hrs)
ART 325: Life Drawing (3 hrs)
ART 340: Painting (3 hrs)
ART 360: Ceramics (3 hrs)
ART 370: Sculpture (3 hrs)
Complete one course from:
ARTH 208: Survey of Art I (3 hrs)
ARTH 209: Survey of Art II (3 hrs)

Complete 4 hours from 300 level ARTH or Studio Art:
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-
Free Electives (10 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## Art and Associated Studies

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core, Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy -
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-

Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
.
Overlays: Writing Across the Curriculum (4 courses)
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## Bachelor of Science

## ART

Pre-Art Therapy Specialization
2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core, Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlays: Writing Across the Curriculum (4 courses)
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Major Requirements (68 hours)
ART 201: Introduction to Art Therapy (3 hrs)
ART 210: Design (3 hrs)
ART 220: Drawing (3 hrs)
ART 221: Drawing (3 hrs)
ART 325: Life Drawing (3 hrs)
ART 340: Painting (3 hrs)
ART 360: Ceramics (3 hrs)
ART 370: Sculpture (3 hrs)
ART 340: Creative Development/Art Therapy (3 hrs)
ART 405: Art Therapy Seminar (2 hrs)
ART 495: Internship in Art (3-12 hrs)
PSYC 121 - Introduction to Psychology (3 hrs)
PSYC 226 - Child \& Adolescent Psychology (3 hrs)
PSYC 245 - Statistics for Psychology (4 hrs)
PSYC 259 - Abnormal Psychology (3 hrs)
PSYC 367 - Theories of Personality/Psychotherapy (3 hrs)
Complete one course from:
ART 330: Printmaking (3 hrs)
ART 345: Watercolor (3 hrs)
ART 350: Metalwork/Jewelry (3 hrs)
Complete 3 additional hours from PSYC:
Complete 9 hours of ART electives:
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Complete 6 hours from ARTH or ARCH:
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Free Electives (11 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## VISUAL COMMUNICATION DESIGN

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core, Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy -
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally and in Writing
.
Overlays: Writing Across the Curriculum (4 courses)
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Major Requirements (52 hours)
ART 210: Design (3 hrs)
ART 213: Computer Graphics (3 hrs)
ART 315: Typography (3 hrs)
ART 316: Publication Design (3 hrs)
ART 322: Digital Photography (3 hrs)
ART 410: Portfolio Preparation (3 hrs)
ART 417: Advanced Imaging/lllustration (3 hrs)
ART 490: Practicum in Art (1-3 hrs)
ART 495: Internship in Art (3-12 hrs)
COMM 211: Advertising and Promotional Strategy (3 hrs)
COMM 251: Principles of Multimedia (3 hrs)
COMM 312: Advertising Copy \& Layout (3 hrs)
COMM 352: Multimedia Strategies (3 hrs

Complete one course from:
ART 220: Drawing (3 hrs)
ART 221: Drawing (3 hrs)
Complete 6 hours of ART electives
-
Complete 6 hours from Art History (ARTH)
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-
Free Electives (27 hours)
9 hours of electives must be from outside of ART and COMM

39 Hours of 300/400 level courses

## Bachelor of Arts or Bachelor of Science with a Major in Applied Biology

Bachelor of Arts or Bachelor of Science with a Major in Applied Biology Education

Bachelor of Arts or Bachelor of Science with a Major in Professional Biology

The Bachelor of Arts and Bachelor of Science degrees with a major in professional biology providebackgroundforfurthereducationinoneofthehealth professions(includingmedicine, dentistry, optometry, and veterinary medicine) or for further graduate study in all specialized areas of the biological sciences. The Bachelor of Arts and Bachelor of Science degrees with a majorinappliedbiologypreparestudentsforcareersaslaboratoryorresearchassistants,forhigh schoolteaching,orforgovernmentservice.Bothbiologymajorsofferabroadknowledgeofthe biologicalsciences,includingexposuretocellbiology,developmentalbiology,ecology,evolution, genetics, microbiology, molecular biology, physiology, organismal biology, and systematics. Undergraduatesareencouragedtoconductin-depthresearchand,dependinguponcareergoals, student projectsmayinvolvetopicsfromgenecloningtocomplexecosysteminteractions.StudentspursuingtheBachelorofArtsmustmeettheforeignlanguageproficiencyrequirementsat thesecond-yearlevelandmaynotearnmorethan 45 hours ofbiologycredittowardgraduation.

Successful completion of this degree qualifies students for teacher certification in Indiana and most other states.

## Gulf Coast Research Laboratory Affiliation

In 1995 an affiliation was established with the Gulf Coast Research Laboratory of the University of Southern Mississippi in Ocean Springs. Students may obtain transfer credit through summer study in marine science areas such as marine ecology, marine invertebrate zoology, marine psychology, and oceanography. See Dr. Edwards for details.

## Biology Minor (18 hours)

Biology 118, 119, 120; additional 200, 300, and 400 level courses in biology to total a minimum of 18 hours (of the additional courses, six hours must be 300- or 400-level biology courses)
Certificates (16 hours)
The Department of Biology awards a certificate in each of four areas upon the completion of a minimum of 16 hours selected from among the courses listed in an area. Up to four hours of independentresearch (Biology 460) in a specific area may be applied toward the completion of the certificate requirements. Certificates are not reflected on the academic transcript.
Botany: Biology 215, 225, 305, 414, 428
Zoology: Biology 214, 333, 350, 425, 427, 434, 450
Field biology: Biology 214, 215, 320, 360, 414, 423
Microbiology: Biology 305, 331, 340, 110 or 430, 434, 442
Biotechnology:requiressuccessfulcompletionofadegreeprograminbiologyorchemistry, with the following courses: Biology 107, 119, 331, 340, 430; Chemistry 118.

## Bachelor of Arts

## BIOLOGY - APPLIED <br> 2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
.
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core, Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
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-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry
- PHYS 100, 121, or 210

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- BIOL 482: Biology Senior Seminar

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (30 hours)
Must complete 29 hours of BIOL including BIOL 482
BIOL 118: Modern Biology: Environmental Perspective (3 hrs)
BIOL 119: Intro Biology: Molecular Perspective (4 hrs)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 320: Evolution and Ecology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
Complete one course from:
BIOL 110: Clinical Microbiology +1 cr. Indep. study ( 4 hrs )
BIOL 430: Microbiology (4 hrs)

7 hours from 200 level BIOL or higher:
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-

Free Electives (43 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## BIOLOGY - APPLIED <br> 2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core, Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry
- PHYS 100, 121, or 210

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- BIOL 482: Biology Senior Seminar

Overlay: Writing Across the Curriculum (4 courses)
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## Major Requirements (37 hours)

Must complete 36 hours of BIOL including BIOL 482
BIOL 118: Modern Biology: Environmental Perspective (3 hrs)
BIOL 119: Intro Biology: Molecular Perspective (4 hrs)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 320: Evolution and Ecology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
Complete one course from:
BIOL 110: Clinical Microbiology +1 cr. Indep. study ( 4 hrs )
BIOL 430: Microbiology (4 hrs)

14 hours from 200 level BIOL or higher:
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Free Electives (42 hours)

39 Hours of 300/400 level courses

## Bachelor of Arts

## BIOLOGY - APPLIED EDUCATION

2019-2020 | 126 Hours Required

## Enduring Foundations General Education Requirements

 (47 hours)Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
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-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry
- PHYS 100, 121, or 210

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- BIOL 482: Biology Senior Seminar

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (79 hours)
Professional Education Requirements
PSYC 226: Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding ( 3 hrs )
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar ( 1 hr )
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School (3 hrs)
EDUC 451: Methods of Teaching Science SH/JH/MS (2 hrs)
Biology Requirements
BIOL 118: Modern Biology: Environmental Perspective (3 hrs)
BIOL 119: Intro Biology: Molecular Perspective (4 hrs)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 320: Evolution and Ecology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
Complete one course from:
BIOL 110: Clinical Microbiology +1 cr . Independent study ( 4 hrs ) BIOL 430: Microbiology (4 hrs)
Complete 6 hours from 200 level BIOL or higher.
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Secondary Science Core
Complete 3 courses from outside the major. Courses may be used in conjunction with general education and major requirements.
Complete three courses from:
CHEM 118: Principles of Chemistry (4 hrs)
PHYS 121: Algebra Physics I (4 hrs)
ASTR 101: Descriptive Astronomy (3 hrs)
GEOG 230: Physical Geography (4hrs)

39 Hours of 300/400 level courses

## Bachelor of Science

## BIOLOGY - APPLIED EDUCATION

2019-2020 | 127 Hours Required

## Enduring Foundations General Education Requirements

 (41 hours)Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry
- PHYS 100, 121, or 210

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- BIOL 482: Biology Senior Seminar

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (86 hours)
Professional Education Requirements
PSYC 226 - Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding ( 3 hrs )
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar (1 hr)
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School (3 hrs)
EDUC 451: Methods of Teaching Science SH/JH/MS (2 hrs)
Biology Requirements
BIOL 118: Modern Biology: Environmental Perspective (3 hrs)
BIOL 119: Intro Biology: Molecular Perspective (4 hrs)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 320: Evolution and Ecology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
Complete one course from:
BIOL 110: Clinical Microbiology + 1 cr . Independent study (4 hrs) BIOL 430: Microbiology (4 hrs)
Complete 13 hours from 200 level BIOL or higher.
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Secondary Science Core
Complete 3 courses from outside the major. Courses may be used in conjunction with general education and major requirements.
Complete three courses from:
CHEM 118: Principles of Chemistry (4 hrs)
PHYS 121: Algebra Physics I (4 hrs)
ASTR 101: Descriptive Astronomy (3 hrs)
GEOG 230: Physical Geography (4hrs)
39 Hours of 300/400 level courses

## Bachelor of Arts

## BIOLOGY - PROFESSIONAL

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)

Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MA
Outcome 8: (7 hrs with at least one lab co
- CHEM 118: Principles of Chemistry
- PHYS 100, 121, or 210
- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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ttcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MA
utcome 8: ( 7 hrs with at least one lab coun
- CHEM 118: Principles of Chemistry
- PHYS 100, 121, or 210
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ticome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH
utcome 8: ( 7 hrs with at least one lab cour
- CHEM 118: Principles of Chemistry
- PHYS 100, 121, or 210
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- BIOL 482: Biology Senior Seminar

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (37 hours)
Must complete 32 hours of BIOL including BIOL 482.
BIOL 118: Modern Biology: Environmental Perspective (3 hrs)
BIOL 119: Intro Biology: Molecular Perspective (4 hrs)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 320: Evolution and Ecology (4 hrs)
BIOL 331: Genetics (4 hrs)
BIOL 340: Cellular and Molecular Biology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 341: Organic Chemistry II (4 hrs)
6 hours from 200 level BIOL or higher:
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Free Electives (36 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## BIOLOGY - PROFESSIONAL <br> 2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry
- PHYS 100, 121, or 210

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- BIOL 482: Biology Senior Seminar

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (45 hours)
Must complete 40 hours of BIOL including BIOL 482.
BIOL 118: Modern Biology: Environmental Perspective (3 hrs)
BIOL 119: Intro Biology: Molecular Perspective (4 hrs)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 320: Evolution and Ecology (4 hrs)
BIOL 331: Genetics (4 hrs)
BIOL 340: Cellular and Molecular Biology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 341: Organic Chemistry II (4 hrs)

14 hours from 200 level BIOL or higher:
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Free Electives (34 hours)

39 Hours of 300/400 level courses

British Studies provides an interdisciplinary survey of cultural and historical developments within British societyfromtheearliesttimestothepresent.Itexplainsthepoliticaldevelopment of the various nations that make up the British Isles and the changing nature of the often-fractious relationship between and among those countries: England, Scotland, Wales, and (Northern) Ireland. The central theme of the required course at Harlaxton is national identity; it is concerned with and seeks to explain the nature of Britain historically, politically, culturally, and intellectually.Thecoursehelpsstudentsunderstandtheprotractedanddifficultprocessbywhich the United Kingdom became unified.

Elements of the core course are integrated into Harlaxton's wide range of extracurricular activities,includingthetravel program.Throughthisholisticapproach,studentsareencouraged to reflect on concepts of identity-national and individual-and the challenges posed by an increasinglyglobalizedworld.AspartofthewiderHarlaxtonexperience,BritishStudiessupports students' development as responsible global citizens.

The required British Studies course aims that students will:

1) Acquire a clear understanding ofmajorhistorical and cultural trends in BritainandIreland;
2) Gainagreatersenseofpersonalandsocial responsibilitythroughintercultural knowledge and competence;
3) Develop a range of intellectual and practical skills, including:
a. inquiry/research and analysis
b. critical and creative thinking
c. written and oral communication
d. information literacy
e. teamwork and problem solving

A range of elective courses, to be taken either at Harlaxton or UE, further supports these objectives andalso supplements and deepensthe student's appreciation of British history and national identity and the U.K.'s political, artistic, cultural, intellectual and religious traditions.

## British Studies Minor (18 hours)

BRIT 282/383/382H, 12 hours from the following: Art History H378, H379, H383, H387, H388; Education H498; English 231, 232, 233, 300, 350, 351, 370, 375, 380, 385; History 318, 319, 381, 383, 385, H491; Interdisciplinary 235, H280, H290; Political Science H385; Religion 250.

## British Studies Certificate (12 hours)

BRIT 282/383/382H, 6 hours from the following: Art History H378, H379, H383, H387, H388; Education H498; English 231, 232, 233, 300, 350, 351, 370, 375, 380, 385; History 318, 319, 381, 383, 385, H491; Interdisciplinary 235, H280, H290; Political Science H385; Religion 250.

# Chemistry 

Bachelor of Arts or Bachelor of Science with a Major in Chemistry - Basic

Bachelor of Science with a major in Chemistry Basic Education

## Bachelor of Arts or Bachelor of Science with a <br> Major in Chemistry - <br> Professional

## Bachelor of Science with a Major in Chemistry - Business Administration

## Bachelor of Arts or Bachelor of Science with a Major in Biochemistry

Bachelor of Science with a Major in Environmental Science

Bachelor of Science with a Major in Environmental Administration

The University of Evansville is approved by the American Chemical Society for undergraduateprofessionaltraininginchemistry.Theprofessionalchemistrymajordescribedbelowmeets theguidelinesformulatedbytheCommitteeonProfessionalTrainingoftheAmericanChemical Society.TheDepartmentofChemistry offersthreechemistrymajors, aco-op programforinterested professional chemistry majors, and a major in biochemistry.

It is possible, with advanced planning, to spend a semester in England and still complete all degreerequirementswithinfouryearsbytakinggeneraleducationcoursesatHarlaxtonCollege.

Chemistry Minor (20 hours)
Chemistry 118, 240, 280, 360; one from Chemistry 341, 351, or 370 and 371

## Environmental Studies

Director: Arlen Kaufman
Theenvironmentalstudiesprogramprovidesdegreeopportunitiesinthreedifferentenvironmental careerareas.TheseincludetheBachelorofSciencedegreewithamajorinenvironmental science,the BachelorofSciencedegreewithamajorinenvironmentaladministration,andabaccalaureatedegree selectedfromanytraditionalmajorcombinedwiththosecoursesconstitutingtheenvironmentalstudies minor.

Graduates with a major in environmental science are well prepared for a variety of career opportunitiesdealing with thecomplexenvironmentalproblemsthatconfrontoursociety.This majorstressesastrongbackgroundinbasicsciencecombinedwithcoursesdealingspecificallywith environmental problems.Itisintendedforthepersoninterestedinlaboratoryandfieldworkorthe general area of detection, measurement, and solution of environmental problems.

Environmental Administrationemphasizes,asavocationalobjective,amanagementposition forapersonfamiliarwiththescientificaspects ofenvironmentalmattersandthegeneral political, social, and economic framework of our society. In addition, a general background is provided in public administration that should aid in advancement possibilities within public agencies.

Environmental Studies Minor (28 hours)
This programprovidesenvironmentalperspectivestothoseentering conventionaloccupations where environmental awareness is important in decision-making and everyday life.
Biology 120, 320; Biology 423 or Chemistry 360; Chemistry 118, 240; Environmental Studies 360; Environmental Studies 103 or Biology 118; Geology 130

## Co-op Program

Acooperativeeducationplanforchemistryorenvironmentalmajorsisavailableasanalternative tothetraditionalfour-yearplan.Theco-opplancombinesclassroomeducationwithfull-timework experience in industry. Please refer to Special Educational Opportunities located in the Degrees, Curriculum, Academic Opportunities section of the catalog.

## Bachelor of Arts

## CHEMISTRY - BASIC <br> 2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (49 hours)

Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
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-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I

Outcome 8: (8 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry*
- PHYS 121: Algebra Physics I or PHYS 210: Calculus Physics I

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (41 hours)
CHEM 118: Principles of Chemistry (4 hrs)*
CHEM 201: Chemistry Seminar Attendance (0 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 280: Inorganic Chemistry I (4 hrs)
CHEM 301: Chemistry Seminar Attendance (0 hrs)
CHEM 341: Organic Chemistry II ( 5 hrs )
CHEM 351: Physical Chemistry I (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CHEM 370: Biochemistry I (3 hrs)
CHEM 371: Biochemistry I Lab (1 hr.)
MATH 222: Calculus I (4 hrs)
Compete four hours from:
CHEM 452: Physical Chemistry II (4 hrs)
CHEM 461: Instrumental Analysis (4 hrs)
CHEM 473: Biochemistry II (3 hrs)
CHEM 474: Biochemistry II Lab (1 hr.)
CHEM 483: Inorganic Chemistry II (4 hrs)
Complete one course from:
PHYS 122: Algebra Physics II (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)

Free Electives (30 hours)

39 Hours of 300/400 level courses
*Satisfies both a general education and a major requirement for a total of 4 hours in one area only.

## Bachelor of Science

## CHEMISTRY - BASIC

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language -
-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I

Outcome 8: (8 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry*
- PHYS 121: Algebra Physics I or PHYS 210: Calculus Physics I

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (41 hours)
CHEM 118: Principles of Chemistry (4 hrs)*
CHEM 201: Chemistry Seminar Attendance (0 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 280: Inorganic Chemistry I (4 hrs)
CHEM 301: Chemistry Seminar Attendance ( 0 hrs )
CHEM 341: Organic Chemistry II (5 hrs)
CHEM 351: Physical Chemistry I (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CHEM 370: Biochemistry I (3 hrs)
CHEM 371: Biochemistry I Lab (1 hr.)
MATH 222: Calculus I (4 hrs)
Compete four hours from:
CHEM 452: Physical Chemistry II (4 hrs)
CHEM 461: Instrumental Analysis (4 hrs)
CHEM 473: Biochemistry II (3 hrs)
CHEM 474: Biochemistry II Lab (1 hr.)
CHEM 483: Inorganic Chemistry II (4 hrs)
Complete one course from:
PHYS 122: Algebra Physics II (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)

Free Electives (36 hours)

39 Hours of 300/400 level courses
*Satisfies both a general education and a major requirement for a total of 4 hours in one area only.

## Bachelor of Arts

## CHEMISTRY BASIC EDUCATION

2019-2020 | 140 Hours Required
Enduring Foundations General Education Requirements (49 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
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-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I

Outcome 8: (8 hrs) Scientific Literacy

- CHEM 118: Principles of Chemistry
- PHYS 121: Algebra Physics I or PHYS 210: Calculus Physics I

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- CHEM 499: Senior Capstone or EDUC 490: Schools in Changing Society
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (91 hours)
Professional Education Requirements
PSYC 226: Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding ( 3 hrs )
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar (1 hr)
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School (3 hrs)
EDUC 451: Methods of Teaching Science SH/JH/MS (2 hrs)
Chemistry Requirements
CHEM 118: Principles of Chemistry (4 hrs)
CHEM 201: Chemistry Seminar Attendance (0 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 280: Inorganic Chemistry I (4 hrs)
CHEM 301: Chemistry Seminar Attendance (0 hrs)
CHEM 341: Organic Chemistry II (5 hrs)
CHEM 351: Physical Chemistry I (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CHEM 370: Biochemistry I (3 hrs)
CHEM 371: Biochemistry I Lab (1 hrs)
MATH 222: Calculus I (4 hrs)
Complete 4 hours from:
CHEM 452: Physical Chemistry II (4 hrs)
CHEM 461: Instrumental Analysis (4 hrs)
CHEM 473: Biochemistry II (3 hrs)
CHEM 474: Biochemistry II Lab (1 hrs)
CHEM 483: Inorganic Chemistry II (4 hrs)
Complete one course from:
PHYS 122: Algebra Physics II (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)
Secondary Science Core
Complete 3 courses from outside the major. Courses may be used in
conjunction with general education and major requirements.
Complete 3 courses from:
BIOL 107: General Biology (4 hrs)
PHYS 121: Algebra Physics I (4 hrs)
ASTR 101: Descriptive Astronomy (3 hrs)
GEOG 230: Physical Geography (4hrs)

39 Hours of 300/400 level courses

## Bachelor of Science

## CHEMISTRY BASIC EDUCATION

2019-2020 | 134 Hours Required
Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I

Outcome 8: (8 hrs) Scientific Literacy

- CHEM 118: Principles of Chemistry
- PHYS 121: Algebra Physics I or PHYS 210: Calculus Physics I

Outcome 9: ( 6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- CHEM 499: Senior Capstone or EDUC 490: Schools in Changing Society
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (91 hours)

## Professional Education Requirements

PSYC 226: Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding ( 3 hrs )
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar ( 1 hr )
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School (3 hrs)
EDUC 451: Methods of Teaching Science SH/JH/MS (2 hrs)
Chemistry Requirements
CHEM 118: Principles of Chemistry (4 hrs)
CHEM 201: Chemistry Seminar Attendance (0 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 280: Inorganic Chemistry I (4 hrs)
CHEM 301: Chemistry Seminar Attendance (0 hrs)
CHEM 341: Organic Chemistry II (5 hrs)
CHEM 351: Physical Chemistry I (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CHEM 370: Biochemistry I (3 hrs)
CHEM 371: Biochemistry I Lab (1 hrs)
MATH 222: Calculus I (4 hrs)
Complete 4 hours from:
CHEM 452: Physical Chemistry II (4 hrs)
CHEM 461: Instrumental Analysis (4 hrs)
CHEM 473: Biochemistry II (3 hrs)
CHEM 474: Biochemistry II Lab (1 hrs)
CHEM 483: Inorganic Chemistry II (4 hrs)
Complete one course from:
PHYS 122: Algebra Physics II (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)
Secondary Science Core
Complete 3 courses from outside the major. Courses may be used in
conjunction with general education and major requirements.
Complete 3 courses from:
BIOL 107: General Biology (4 hrs)
PHYS 121: Algebra Physics I (4 hrs)
ASTR 101: Descriptive Astronomy (3 hrs)
GEOG 230: Physical Geography (4hrs)

39 Hours of 300/400 level courses

## Bachelor of Science

## CHEMISTRY - PROFESSIONAL

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language -
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry*
- PHYS 100, 121, or 210

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (53 hours)
CHEM 118: Principles of Chemistry (4 hrs)*
CHEM 201: Chemistry Seminar Attendance (0 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 280: Inorganic Chemistry I (4 hrs)
CHEM 301: Chemistry Seminar Attendance (0 hrs)
CHEM 341: Organic Chemistry II ( 5 hrs )
CHEM 351: Physical Chemistry I (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CHEM 370: Biochemistry I (3 hrs)
CHEM 452: Physical Chemistry (4 hrs)
CHEM 461: Instrumental Analysis (4 hrs)
CHEM 483: Inorganic Chemistry II (4 hrs)
MATH 222: Calculus I (4 hrs)
MATH 323: Calculus III (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)
Complete one course from:
CHEM 371: Biochemistry I Lab (1 hr)
CHEM 493: Short Topics on Advanced Chemistry (1-3 hrs)
CHEM 495: Research (1-2 hrs)

Free Electives (26 hours)

39 Hours of 300/400 level courses
*Satisfies both a general education and a major requirement for a total of 4 hours in one area only.

## Bachelor of Arts

## CHEMISTRY - PROFESSIONAL

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements (47 hours)

Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry*
- PHYS 100, 121, or 210

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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-

## Bachelor of Science

## CHEMISTRY - BUSINESS ADMINISTRATION

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (43 hours)
Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language -
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry*
- PHYS 121: Algebra Physics I or PHYS 210: Calculus Physics I

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (42 hours)
ACCT 210: Intro to Financial Accounting (3 hrs)
CHEM 118: Principles of Chemistry (4 hrs)*
CHEM 201: Chemistry Seminar Attendance (0 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 280: Inorganic Chemistry I (4 hrs)
CHEM 351: Physical Chemistry I (4 hrs)
CHEM 301: Chemistry Seminar Attendance (0 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
FIN 361: Fundamentals of Finance ( 3 hrs )
MGT 331: International Business Strategy (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
MATH 222: Calculus I (4 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
PHYS 122: Algebra Physics II (4 hrs) OR
PHYS 211: Calculus Physics II (4 hrs)

Free Electives (35 hours)

39 Hours of 300/400 level courses
*Satisfies both a general education and a major requirement for a total of 4 hours in one area only.

## Bachelor of Arts

## BIOCHEMISTRY

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (49 hours)

Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity -

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
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-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- BIOL 119: Intro to Biology: Molecular Perspective
- PHYS 121: Algebra Physics I or PHYS 210: Calculus Physics I

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
.
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (54 hours)
BIOL 120: Intro to Biology: Organismal Diversity (4 hrs)
BIOL 331: Genetics (4 hrs)
CHEM 118: Principles of Chemistry (4 hrs)
CHEM 201: Chemistry Seminar Attendance (0 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 280: Inorganic Chemistry I (4 hrs)
CHEM 341: Organic Chemistry II (5 hrs)
CHEM 301: Chemistry Seminar Attendance (0 hrs)
CHEM 351: Physical Chemistry I (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CHEM 370: Biochemistry I (3 hrs)
CHEM 371: Biochemistry I Lab (1 hr.)
CHEM 473: Biochemistry II (3 hrs)
CHEM 474: Biochemistry II Lab (1 hr.)
MATH 222: Calculus I (4 hrs)
PHYS 122: Algebra Physics II (4 hrs) OR
PHYS 211: Calculus Physics II (4 hrs)
Complete one course from:
BIOL 340: Cellular and Molecular Biology (4 hrs)
BIOL 427: Animal Physiology (4 hrs)
BIOL 430: Microbiology (4 hrs)
BIOL 442: Immunology (4 hrs)
Complete one course from:
CHEM 452: Physical Chemistry II (4 hrs)
CHEM 461: Instrumental Analysis (4 hrs)
CHEM 483: Inorganic Chemistry II (4 hrs)

Free Electives (17 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## BIOCHEMISTRY

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (43 hours)
Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity -

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language . -

Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- BIOL 119: Intro to Biology: Molecular Perspective
- PHYS 121: Algebra Physics I or PHYS 210: Calculus Physics I

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (54 hours)
BIOL 120: Intro to Biology: Organismal Diversity (4 hrs)
BIOL 331: Genetics (4 hrs)
CHEM 118: Principles of Chemistry (4 hrs)
CHEM 201: Chemistry Seminar Attendance ( 0 hrs )
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 280: Inorganic Chemistry I (4 hrs)
CHEM 341: Organic Chemistry II (5 hrs)
CHEM 301: Chemistry Seminar Attendance (0 hrs)
CHEM 351: Physical Chemistry I (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CHEM 370: Biochemistry I (3 hrs)
CHEM 371: Biochemistry I Lab (1 hr.)
CHEM 473: Biochemistry II (3 hrs)
CHEM 474: Biochemistry II Lab (1 hr.)
MATH 222: Calculus I (4 hrs)
PHYS 122: Algebra Physics II (4 hrs) OR
PHYS 211: Calculus Physics II (4 hrs)
Complete one course from:
BIOL 340: Cellular and Molecular Biology (4 hrs)
BIOL 427: Animal Physiology (4 hrs)
BIOL 430: Microbiology (4 hrs)
BIOL 442: Immunology (4 hrs)
Complete one course from:
CHEM 452: Physical Chemistry II (4 hrs)
CHEM 461: Instrumental Analysis (4 hrs)
CHEM 483: Inorganic Chemistry II (4 hrs)

Free Electives (23 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## ENVIRONMENTAL SCIENCE

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
Outcome 7:Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- PHYS 121: Algebra Physics I (4 hrs) OR PHYS 210: Calculus Physics I (4 hrs)
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
.
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (54 hours)
BIOL 118: Modern Biology: Environmental Perspective (3 hrs)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 320: Evolution and Ecology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 280: Inorganic Chemistry I (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CE 374: Environmental Engineering I (3 hrs)
ES 360: Science of Environmental Pollutants (3 hrs)
ES 440: Environmental Law/Regulatory Policy ( 3 hrs )
ES 495: Environmental Studies Internship (3 hrs)
GEOL 130: Environmental Geology (3 hrs)
Complete one course from:
PHYS 122: Algebra Physics II (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)
Environmental Science Electives
12 hours of 300/400 level courses, chosen in consultation with the environmental studies program director.
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Free Electives (25 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## ENVIRONMENTAL ADMINISTRATION

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7:Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- PHYS 121: Algebra Physics I (4 hrs) OR

PHYS 210: Calculus Physics I (4 hrs)
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (54 hours)
BIOL 118: Modern Biology: Environmental Perspective (3 hrs)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 320: Evolution and Ecology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
ES 360: Science of Environmental Pollutants (3 hrs)
ES 440: Environmental Law/Regulatory Process (3 hrs)
ES 495: Environmental Studies Internship (3 hrs)
GEOL 130: Environmental Geology (3 hrs)
LAW 201: Legal Environment of Business (3 hrs)
LS 380: Administrative Law (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
PSCI 349: State and Local Government (3 hrs)

Complete one course from:
QM 227: Introduction to Statistics (3 hrs)
BIOL 415: Biostatistics (4 hrs)
ECON 300: Regression Analysis (3 hrs)
HSA 467: Statistics Appraisal/Evaluation (3 hrs)
MATH 466: Mathematical Statistics (3 hrs)
PSCI 212: Research Methods-Political Science (3 hrs)
PSYC 245: Statistics for Psychologist (4 hrs)
PSYC 246: Research Methods in Psychology (4 hrs)
SOC 235: Social Research Methods (4 hrs)
SOC 344: Introduction to Behavioral Statistics (4 hrs
Environmental Administration Electives
12 hours of 300/400 level courses, chosen in consultation with the environmental studies program director.
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Free Electives (25 hours)

39 Hours of 300/400 level courses

# Classical Studies 

# Bachelor of Arts with a Major in Classical Studies 

> Bachelor of Arts with a Major in Classical Studies and a Concentration in Language and Literature

The major in classical studies is an interdisciplinary liberal arts major intended for students whowishtostudyGreekandRomanantiquity withanemphasisonclassicallanguage,literature, and history. The major requires that students have a minimum of three years of either Greek or Latin, or two years of both Greek and Latin. Other classes will be selected from archaeology, history, philosophy,andworldliterature.Thesecourseswill provideabroadperspectiveonGreek and Roman civilization, while the facility that students develop with the classical languages enables them to use primary source material in their studies.

Studentsdeveloppowers ofcriticalanalysis,anappreciationofliterature,andanunderstanding of the documents and traditions which constitute the foundations of Western civilization. Themajor provides a superior liberal arts education offering excellent college preparationfora number of professional fields such as law or library science. The major also prepares students for graduate studies in classics or to obtain a master's degree in teaching Latin for preparatory and high schools. The minor will be of particular interest to students majoring in archaeology, literature, history, Biblical studies, or a foreign language.

Majorsareencouragedtospendatleastonesemesterabroad,eitheratHarlaxtonCollegeorat anotherapprovedstudyabroadprogramsuchasCollegeYearinAthensortheIntercollegiateCenter for Classical Studies in Rome. Harlaxton College is located in an area rich with remains of the Roman civilization in Britain. It is possible to spend a semester in England or even to attend studyabroad programs for an entire year and still complete all degree requirements within four years.

## Classical Studies Minor (18 hours)

The courses in Greek or Latin which satisfy the minor requirement also satisfy the University's foreign language requirement.

Atleastthree coursesinGreekorLatinnumbered 200 orabove;atleasttwo coursesfrom Archaeology $105,106,305,306,307,308,309,320,395,492$; at least one course from History 311, 312, Interdisciplinary 250, 325, Philosophy 211, Religion 210, 330

## Classical Languages Minor (18 hours)

In the classical languages minor, students gain facility in both classical languages, Greek and Latin.Studentschooseanarea of primary competencein oneclassicallanguage(GreekorLatin) and an area of secondary competence in the other classical language (or the other classical languageandHebrew).Classicallanguageminorsdevelopamasteryoftheclassicallanguages, powersofcriticalanalysis,anappreciation ofliterature,andanunderstanding ofthedocuments and traditions which constitute the foundation of Western civilization.

Primary competence: four courses in Greek or Latin numbered 200 or above
Secondarycompetence:twocoursesnumbered 200 oraboveintheotherclassicallanguageorthe course numbered 211 in the other classical language and Hebrew 112

## Bachelor of Arts

## CLASSICAL STUDIES

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)
Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity -

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- ARCH 400, HIST 490, PHIL 499, or REL 499

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (27 hours)
Complete 4* courses in Greek or Latin at the 200/300/400 level.
*2 of these courses may be used to fulfill Outcome 6 of the general education
Complete four courses from:
HIST 311: The Greeks and the East (3 hrs)
HIST 312: The Evolution of Rome (3 hrs)
ID 250: Myths of the Greeks (3 hrs)
ID 325: Alexander the Great (3 hrs)
PHIL 211: Ancient Greek Philosophy (3 hrs)
REL 210: Ancient Christianity (3 hrs)
REL 330: Paul and His Letters (3 hrs)
Complete three courses from:
ARCH 105: Intro to Greek Archaeology (3 hrs)
ARCH 106: Intro to Roman Archaeology (3 hrs)
ARCH 305: Greek Painted Pottery (3 hrs)
ARCH 306: Greek Architecture (3 hrs)
ARCH 307: Roman Architecture (3 hrs)
ARCH 308: Greek and Roman Sculpture (3 hrs)
ARCH 309: The Etruscans (3 hrs)
ARCH 320: Topics in Archaeology (3 hrs)
ARCH 395: Practicum in Archaeology (3-6 hrs)
ARCH 492: Topical Seminars in Archaeology (3 hrs)
Free Electives (46 hours)

39 Hours of 300/400 level courses

## Bachelor of Arts

## CLASSICAL STUDIES <br> LANGUAGE AND LITERATURE SPECIALIZATION

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements (47 hours)
Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
.
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity -

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
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-
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-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- ARCH 400, HIST 490, PHIL 499, or REL 499

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (30 hours)
Complete 7* courses in Greek or Latin at the 200/300/400
level.
Students must choose at least four courses in one language and at least two courses in another.
*2 of these courses may be used to fulfill Outcome 6 of the general education
Complete three courses from:
HIST 311: The Greeks and the East (3 hrs)
HIST 312: The Evolution of Rome (3 hrs)
ID 250: Myths of the Greeks (3 hrs)
ID 325: Alexander the Great (3 hrs)
PHIL 211: Ancient Greek Philosophy (3 hrs)
REL 210: Ancient Christianity (3 hrs)
REL 330: Paul and His Letters (3 hrs)
Complete two courses from:
ARCH 105: Intro to Greek Archaeology (3 hrs)
ARCH 106: Intro to Roman Archaeology (3 hrs)
ARCH 305: Greek Painted Pottery (3 hrs)
ARCH 306: Greek Architecture (3 hrs)
ARCH 307: Roman Architecture (3 hrs)
ARCH 308: Greek and Roman Sculpture (3 hrs)
ARCH 309: The Etruscans (3 hrs)
ARCH 320: Topics in Archaeology (3 hrs)
ARCH 395: Practicum in Archaeology (3-6 hrs)
ARCH 492: Topical Seminars in Archaeology (3 hrs)
Free Electives (43 hours)

39 Hours of 300/400 level courses

## Communication

Bachelor of Arts or Bachelor of Science with a Major in Communication specialization in Advertising and Public Relations, Journalism, Multimedia Production or Other available.<br>Bachelor of Arts or Bachelor of Science with a Major in Health Communication

Bachelor of Arts or Bachelor of Science with a Major in Sport Communication

The Department of Communication offers Bachelor of Arts and Bachelor of Science degrees in communication

This major prepares studentsfor a variety of related professional careers involving communication. Students receive cross-training in various media and communication skills while also studying in greater depth one of three specialty areas: advertising and public relations, journalism, or multimedia. To acquire practical experience in the area of their choice, students are required to earn both practicum and internship credits. They are also required to earn either a minororaspecializationinanareaoutsidecommunication.Communicationcoursesarescheduled to allow students to attend Harlaxton College without disrupting their course sequences and graduation schedule.

## Communication Minor (18 hours)

Communication 130, 485; two from Communication 210, 211, 220, 221, 231, 251; two from one ofthefourspecialtyareas-advertisingand publicrelations,journalism,multimedia production, or organizational communication.

## Bachelor of Arts

## COMMUNICATION

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements (47 hours)
Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity -

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic
Knowledge

- COMM 130: Intro to Communication*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
-
Major Requirements (45 hours)
COMM 130: Intro to Communication (3 hrs)*
COMM 210: Professional Speaking (3 hrs)
COMM 211: Advertising and Promotional Strategy (3 hrs)
COMM 220: Principles of Public Relations (3 hrs)
COMM 221: Media Writing (3 hrs)
COMM 231: Basic Reporting (3 hrs)
COMM 251: Principles of Multimedia (3 hrs)
COMM 391: Practicum (2 hrs)
COMM 391: Professional Development ( 1 hr )
COMM 395: Internship (1 hr)
COMM 483: Media Theory and Research (3 hrs)
COMM 485: Media Law and Ethics (3 hrs)

## SPECIALTY AREAS

Choose ONE of the following:
Advertising and Public Relations
COMM 312: Advertising Copy \& Layout (3 hrs)
COMM 314: Advertising and PR Campaigns (3 hrs)
COMM 322: Strategic Public Relations (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 388: Organizational Communication Models (3 hrs)
Journalism
COMM 322: Strategic Public Relations (3 hrs)
COMM 332: Advanced Writing (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
Complete one from:
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
Multimedia Production
COMM 240: Live Events (3 hrs)
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
COMM 450: Multimedia Portfolio (3 hrs)
MINOR or additional SPECIALIZATION (18 hours)
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-
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Free Electives (10 hours)

39 Hours of 300/400 level courses)
NOTES:
*Satisfiesbothageneraleducationandamajorrequirementforatotal of 3 hours in one area only.

## Bachelor of Science

## COMMUNICATION

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements (41 hours)
Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity -

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language -
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- COMM 130: Intro to Communication*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
-
-
-
Major Requirements (45 hours)
COMM 130: Intro to Communication (3 hrs)*
COMM 210: Professional Speaking (3 hrs)
COMM 211: Advertising and Promotional Strategy (3 hrs)
COMM 220: Principles of Public Relations (3 hrs)
COMM 221: Media Writing (3 hrs)
COMM 231: Basic Reporting (3 hrs)
COMM 251: Principles of Multimedia (3 hrs)
COMM 391: Practicum (2 hrs)
COMM 391: Professional Development ( 1 hr )
COMM 395: Internship (1 hrs)
COMM 483: Media Theory and Research (3 hrs)
COMM 485: Media Law and Ethics (3 hrs)

## SPECIALTY AREAS

Choose ONE of the following:
Advertising and Public Relations
COMM 312: Advertising Copy \& Layout (3 hrs)
COMM 314: Advertising and PR Campaigns (3 hrs)
COMM 322: Strategic Public Relations (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 388: Organizational Communication Models (3 hrs)
Journalism
COMM 322: Strategic Public Relations (3 hrs)
COMM 332: Advanced Writing (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
Complete one from:
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
Multimedia Production
COMM 240: Live Events (3 hrs)
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
COMM 450: Multimedia Portfolio (3 hrs)
MINOR or additional SPECIALIZATION (18 hours)
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-
Free Electives (16 hours)

39 Hours of 300/400 level courses
NOTES:
*Satisfiesbothageneraleducationandamajorrequirementforatotal of 3 hours in one area only.

## Bachelor of Arts

## HEALTH COMMUNICATION

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
Complete courses or proficiency through 212 level.
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- One from: BIOL 100, BIOL 107, CHEM 100, CHEM 108, or CHEM 118
- One from: ES 103 or NEUR 125

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- COMM 130: Intro to Communication*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
-
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Major Requirements (61 hours)
COMM 130: Intro to Communication (3 hrs)*
COMM 210: Professional Speaking (3 hrs)
COMM 211: Advertising and Promotional Strategy (3 hrs)
COMM 220: Principles of Public Relations (3 hrs)
COMM 221: Media Writing (3 hrs)
COMM 231: Basic Reporting (3 hrs)
COMM 251: Principles of Multimedia (3 hrs)
COMM 391: Practicum (2 hrs)
COMM 391: Professional Development (1 hr)
COMM 395: Internship (1 hr)
COMM 410: Health Communication (3 hrs)
COMM 483: Media Theory and Research (3 hrs)
COMM 485: Media Law and Ethics (3 hrs)
HSA 405: Health Care Systems: Issues (3 hrs)
HSA 414: Health Care Management Theory/HR (3 hrs)
HSA 420: Health Care Planning/Marketing (3 hrs)
PH 190: Intro to Public Health (3 hrs)
PH 195: Global Health Issues (3 hrs)
SPECIALTY AREAS
Choose ONE of the following:
Advertising and Public Relations
COMM 312: Advertising Copy \& Layout (3 hrs)
COMM 314: Advertising and PR Campaigns (3 hrs)
COMM 322: Strategic Public Relations (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 388: Organizational Communication Models (3 hrs)
Journalism
COMM 322: Strategic Public Relations (3 hrs)
COMM 332: Advanced Writing (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
Complete one course from:
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
Multimedia Production
COMM 240: Live Events (3 hrs)
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
COMM 450: Multimedia Portfolio (3 hrs)
Free Electives (12 hours)

39 Hours of 300/400 level courses

NOTES:
*Satisfiesbothageneraleducationandamajorrequirementforatotal of 3 hours in one area only.

## Bachelor of Science

## HEALTH COMMUNICATION

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements
(41 hours)
Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- One from: BIOL 100, BIOL 107, CHEM 100, CHEM 108, or CHEM 118
- One from: ES 103 or NEUR 125

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- COMM 130: Intro to Communication*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (61 hours)
COMM 130: Intro to Communication (3 hrs)*
COMM 210: Professional Speaking (3 hrs)
COMM 211: Advertising and Promotional Strategy (3 hrs)
COMM 220: Principles of Public Relations (3 hrs)
COMM 221: Media Writing (3 hrs)
COMM 231: Basic Reporting (3 hrs)
COMM 251: Principles of Multimedia (3 hrs)
COMM 390: Practicum (2 hrs)
COMM 391: Professional Development (1 hr)
COMM 395: Internship (1 hr)
COMM 410: Health Communication (3 hrs)
COMM 483: Media Theory and Research (3 hrs)
COMM 485: Media Law and Ethics (3 hrs)
HSA 405: Health Care Systems: Issues (3 hrs)
HSA 414: Health Care Management Theory/HR (3 hrs)
HSA 420: Health Care Planning/Marketing (3 hrs)
PH 190: Intro to Public Health (3 hrs)
PH 195: Global Health Issues (3 hrs)
SPECIALTY AREAS
Complete ONE of the following areas:
Advertising and Public Relations
COMM 312: Advertising Copy \& Layout (3 hrs)
COMM 314: Advertising and PR Campaigns (3 hrs)
COMM 322: Strategic Public Relations (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 388: Organizational Communication Models (3 hrs)
Journalism
COMM 322: Strategic Public Relations (3 hrs)
COMM 332: Advanced Writing (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
One of:
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
Multimedia Production
COMM 240: Live Events (3 hrs)
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
COMM 450: Multimedia Portfolio (3 hrs)
Free Electives (18 hours)

39 Hours of 300/400 level courses

NOTES:
*Satisfiesbothageneraleducationandamajorrequirementforatotal of 3 hours in one area only.

## Bachelor of Arts

## SPORTS COMMUNICATION

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity -
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
Complete courses or proficiency through 212 level.
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-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- COMM 130: Intro to Communication*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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-

Major Requirements (61 hours)
COMM 130: Intro to Communication (3 hrs)*
COMM 210: Professional Speaking (3 hrs)
COMM 211: Advertising and Promotional Strategy (3 hrs)
COMM 220: Principles of Public Relations (3 hrs)
COMM 221: Media Writing (3 hrs)
COMM 231: Basic Reporting (3 hrs)
COMM 251: Principles of Multimedia (3 hrs)
COMM 391: Professional Development ( 1 hr )
COMM 483: Media Theory and Research (3 hrs)
COMM 485: Media Law and Ethics (3 hrs)
COMM 390: Practicum (2 hrs)
COMM 395: Internship (1 hr)
COMM 325: Sports Promotion (3 hrs)
COMM 335: Sports Writing (3 hrs)
COMM 332: Advanced Writing (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
One approved Business elective ( 3 hrs )
SPECIALTY AREAS
Complete ONE of the following areas:
Advertising and Public Relations
COMM 312: Advertising Copy \& Layout (3 hrs)
COMM 314: Advertising and PR Campaigns (3 hrs)
COMM 322: Strategic Public Relations (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 388: Organizational Communication Models (3 hrs)
Journalism
COMM 322: Strategic Public Relations (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
Multimedia Production
COMM 240: Live Events (3 hrs)
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
COMM 450: Multimedia Portfolio (3 hrs)

Free Electives (12 hours)

39 Hours of 300/400 level courses

NOTES:
*Satisfiesbothageneraleducationandamajorrequirementforatotal of 3 hours in one area only.

## Bachelor of Science

## SPORTS COMMUNICATION

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- COMM 130: Intro to Communication*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (61 hours)
COMM 130: Intro to Communication (3 hrs)*
COMM 210: Professional Speaking (3 hrs)
COMM 211: Advertising and Promotional Strategy (3 hrs)
COMM 220: Principles of Public Relations (3 hrs)
COMM 221: Media Writing (3 hrs)
COMM 231: Basic Reporting (3 hrs)
COMM 251: Principles of Multimedia (3 hrs)
COMM 391: Professional Development ( 1 hr )
COMM 483: Media Theory and Research (3 hrs)
COMM 485: Media Law and Ethics (3 hrs)
COMM 390: Practicum (2 hrs)
COMM 395: Internship (1 hr)
COMM 325: Sports Promotion (3 hrs)
COMM 335: Sports Writing (3 hrs)
COMM 332: Advanced Writing (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
One approved Business elective (3 hrs)
SPECIALTY AREAS
Complete ONE of the following areas:
Advertising and Public Relations
COMM 312: Advertising Copy \& Layout (3 hrs)
COMM 314: Advertising and PR Campaigns (3 hrs)
COMM 322: Strategic Public Relations (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 388: Organizational Communication Models (3 hrs)
Journalism
COMM 322: Strategic Public Relations (3 hrs)
COMM 333: News Copyediting (3 hrs)
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
Multimedia Production
COMM 240: Live Events (3 hrs)
COMM 345: Video Production (3 hrs)
COMM 351: Web Design (3 hrs)
COMM 352: Multimedia Strategies (3 hrs)
COMM 450: Multimedia Portfolio (3 hrs)

Free Electives (18 hours)

39 Hours of 300/400 level courses

NOTES:
*Satisfiesbothageneraleducationandamajorrequirementforatotal of 3 hours in one area only.

## Creative Writing

## Bachelor of Arts with a Major in Writing

Bachelor of Fine<br>Arts with a Major in Creative Writing

TheDepartmentofCreativeWritingoffersmajorsandminorsinwritingforstudents preparing for careers in such fields as writing, teaching, publishing, business, librarianship, law, medicine, ministry,anddiplomacy.Coursesarealsoavailablefornon-majorsseekingpersonalenrichmentor wishingtoexpandtheirpowersofwrittenexpression.TheBachelorofArtsdegreemaybeearned inwritingortheBachelorofFine Artsdegreemaybeearnedincreativewriting.Requirementsfor studentsinEnglishpreparingforsecondaryeducationareoutlinedintheCollegeofEducationand Health Sciences section.

Harlaxton College in Grantham, England
Study at Harlaxton College can be especially valuable for a writing student. Courses on Shakespeare and the English novel, along with several electives in literature, are offered most semestersatHarlaxton(seewww.harlaxton.evansville.edu).Special programsareoftenarranged at the Royal Shakespeare Theatre in Stratford-upon-Avon, and visits to locales of significant authors and works are readily arranged.

Writing Minor (21 hours)
Writing 204, 205, and five or more courses from 206, 207, 306, 307, 308, 309, 390, 490 or 495

## Bachelor of Arts

WRITING
2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements
(47 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- WRTG 480: Senior Seminar in Creative Writing

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (36 hours)
ENGL 241: Major American Writers I (3 hrs)
ENGL 242: Major American Writers II (3 hrs)
ENGL 350: Shakespeare (3 hrs)
WRTG 204: Copy Editing (3 hrs)

Complete one additional literature course (3 hrs)
Complete 21 hours from:
WRTG 205: Introduction to Creative Writing (3 hrs)
WRTG 206: Introduction to Poetry (3 hrs)
WRTG 207: Introduction to Short Story (3 hrs)
WRTG 211: Introduction to Creative Nonfiction (3 hrs)
WRTG 306: Short Story Writing (3 hrs)
WRTG 307: Poetry Writing (3 hrs)
WRTG 309: Genre Fiction (3 hrs)
WRTG 310: Editing and Publishing (3 hrs)
WRTG 311: Advanced Creative Nonfiction (3 hrs)
WRTG 330: Special Topics in Writing (3 hrs)
WRTG 390: Screenwriting (3 hrs)
WRTG 490: Writing Workshop (3 hrs)
WRTG 494: Writing Internship (1-6 hrs)
WRTG 495: Creative Writing Independent Study (1-9 hrs)
Free Electives (37 hours)

39 Hours of 300/400 level courses

## Bachelor of Fine Arts

## CREATIVE WRITING

## 2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements

## (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
.
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- WRTG 480: Senior Seminar in Creative Writing

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements ( 60 hours)
Complete 60 hours from any combination of available courses in writing and literature, including interdisciplinary 200 (International Cinema) and interdisciplinary 205 (American Cinema).

Free Electives (19 hours)

39 Hours of 300/400 level courses

## Bachelor of Arts with a Major in Literature

## Bachelor of Science with a Major in English Education

The Department of English offers majors and minors in literature for students preparing for careersinsuchfieldsaswriting,teaching,publishing,business,librarianship,law,medicine,ministry, anddiplomacy.Coursesarealsoavailablefornon-majorsseekingpersonalenrichmentorwishingto expandtheirpowers ofwrittenexpression.TheBachelorofArtsdegreemay beearnedinliterature. RequirementsforstudentsinEnglishpreparingforsecondaryeducationareoutlinedintheCollege of Education and Health Sciences section.

Literature Minor (21 hours)
English 223, 231, 232, 241, 242, 350; one English elective

## Bachelor of Science with a Major in English Education

SuccessfulcompletionofthisdegreequalifiesstudentsforteachercertificationinIndianaand most other states.

## Bachelor of Arts

## LITERATURE

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements

 (47 hours)Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
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-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (36 hours)
ENGL 120: Intro to Literature I (3 hrs)
ENGL 231: Masterpieces of British Literature I (3 hrs)
ENGL 232: Masterpieces of British Literature II (3 hrs)
ENGL 241: Major American Writers I (3 hrs)
ENGL 242: Major American Writers II (3 hrs)
ENGL 350: Shakespeare (3 hrs)
Complete 9 hours of British Literature from:
ENGL 300: Early English Writers (3 hrs)
ENGL 310: The Renaissance \& 17th Century (3 hrs)
ENGL 351: The British Novel (3 hrs)
ENGL 370: Age of Enlightenment (3 hrs)
ENGL 375: The Romantic Movement (3 hrs)
ENGL 380: The Victorian Period (3 hrs)
ENGL 385: The Twentieth Century (3 hrs)
Complete 9 hours from 300/400 level ENGL:

- ENGL 223: World Classics (may substitute for one of these additional courses.)
- ENGL 330: Special Topics in Literature (may be taken up to three times, if different topic)
- Courses may also be chosen from the British Literature list above

Free Electives (37 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## ENGLISH EDUCATION

2019-2020 | 122 Hours Required

Enduring Foundations General Education Requirements
(41 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy -
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
.
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
- 

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
.
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (81 hours)
Professional Education Requirements
PSYC 226: Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar ( 1 hr )
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School (3 hrs)
EDUC 453: Methods of Teaching English SH/JH/MS (2 hrs)
English Language Arts Requirements
COMM 210: Professional Speaking (3 hrs)
ENGL 120: Intro to Literature I (3 hrs)
ENGL 231: Masterpieces of British Literature I (3 hrs)
ENGL 232: Masterpieces of British Literature II (3 hrs)
ENGL 241: Major American Writers I (3 hrs)
ENGL 242: Major American Writers II (3 hrs)
ENGL 340: Contemporary World Literature (3 hrs)
ENGL 350: Shakespeare (3 hrs)
ENGL 351: The British Novel (3 hrs) OR
ENGL 352: The Young Adult Novel (3 hrs)
ENGL 353: The American Novel (3 hrs)
WRTG 204: Copy Editing (3 hrs)
WRTG 205: Introduction to Creative Writing (3 hrs)
Complete one course from:
ENGL 122: Modern World Literatures (3 hrs)
ENGL 223: World Classics
Complete one course from:
WRTG 211: Introduction to Creative Nonfiction (3 hrs) WRTG 312: Advanced Exposition (3 hrs)

39 Hours of 300/400 level courses

Bachelor of Arts with a Major in Spanish

Bachelor of Arts with a Major in Spanish with a Medical Spanish Specialization

## Bachelor of Science <br> with a Major in Spanish Education

In keeping with the global focus of the University of Evansville, the Department of Foreign Languages and Cultures offers an array of degree programs. Students may elect a full liberal arts major or minor in French, German, or Spanish as well as an education major or minor in these threelanguages.FurtheroptionsincludeaminorinRussianstudiesandclassesinGreekandLatin. Aclassicalstudiesmajorandminorandaclassicallanguagesminorarealsooffered.Studentsare encouragedtocombinealanguagemajorwithanadditionalmajorsuchasHistory,International Studies, Environmental Studies, Archaeology, Global Business, Public Health Administration, CreativeWriting,etc.Thesecomplementarydegreesprovidegraduateswithanedgetocompete in a global market.

## Classical Languages Minor (18 hours)

In the classical languages minor, students gain facility in both classical languages, Greek, and Latin.Studentschooseanarea of primary competenceinoneclassicallanguage(GreekorLatin) and an area of secondary competence in the other classical language (or the other classicallanguage).Classicallanguageminorsdevelopamastery oftheclassicallanguages, powersofcritical analysis, an appreciation of literature, and an understanding of the documents and traditions which constitute the foundation of Western civilization. The requirements are primary competence in Greek or Latin-four courses numbered 200 or above;secondary competence-two coursesnumbered 200 oraboveintheotherclassicallanguageorthecoursenumbered 211 inthe other classical language.

French, German, or Spanish Minor (18 hours)
Foreign languageand culture minors are required to take 18 hours at the 200-levelandabove in the target language. French/German/Spanish minors take 211, 212, 12 hours at the 300/400level. FREN 311 is a prerequisite for all French upper-level courses. GERM 311 or 312 is a pre-requisiteforallupper-levelGermancourses.SPAN312isaprerequisiteforallupper-leveISpanish courses. French, German, and Spanish minors who take FLC 401 as their capstone course must present their senior thesis in the target language as part of FLC 401.

Medical Spanish Minor (18 hours)
The medical Spanish minor requires 18 credit hours, which includes the following specific courses: SPAN 211, 212, 312, 325, 350, and another 300/400-level Spanish course. SPAN 312, 325 , and 350 must be taken at UE.

Russian Studies Minor (18 hours)
Theminorin Russianstudiescombines Russianlanguagecourseswith coursestaughtinEnglish on Russian culture and literature. It requires 18 credit hours at the 200-level orabove, including a minimum of 12 hours of Russian language courses (Russian 211-312); and the choice of two courses from Russian culture or literature (Russian 333, 334, and English 344) Nine semester hours of course work at a Russian university may be counted toward these requirements.

## Secondary Education Teaching Minors

Grades 9-12. Students may not count 111 or 112 toward the minor.
In addition to the University's general education requirements, foreign language minors are requiredtotake24hoursatthe200-levelandabove.Anapprovedstudyabroad programofatleast sixsemesterhoursishighlyrecommended.ThosecoursesreplaceUniversity ofEvansvillecourses.
French ( 24 hours): 211, 212, and 18 hours beyond
German ( 24 hours): 211,212 , and 18 hours beyond
Spanish ( 24 hours): 211, 212, and 18 hours beyond

## Course Summaries

Beginning and Intermediate Language Sequence Beginning foreignlanguage courses $(111,112)$ introduce the student to the four skills of speaking, listening, reading, and writing, with emphasisonculturalawareness.Studentsmayberequiredtodoadditional work with audio-visual media, or computer-assisted practice.
Intermediateforeignlanguage courses (211,212) aredesignedforthe studentwhoalready hasagoodgraspoftheelements ofthelanguage and is somewhat advanced in the four skills of speaking, listening, reading, andwriting.Studentsplacedinthesecoursesusuallyhavehad three or four years of high school foreign language or have made an appropriatescoreontheproficiencytest.Intermediateforeignlanguage courses continue development of speaking and listening skills and stressgrowthintheareas ofreading,composition, and culturalawareness. Students may be required to do additional work with a foreign languageteachingassistant,audio-visualmedia,orcomputer-assisted practice.

## Advanced Courses

Advancedcoursesareatthe 300 -leveland 400 -level courses. Courses areoffered in rotation andaddressculture,literature,languageanalysis, linguistics, business, politics, society, and cinema. All courses emphasize conversation, composition, and reading skills within a culturalcontext.Lecturesandassignmentsareinthetargetlanguage.
Pleaserefertothebackofthecatalogforindividualcoursedescriptions and prerequisites.

## Bachelor of Arts

## SPANISH

2018-2019| 120 Hours Required
Enduring Foundations General Education Requirements (47 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: Linguistic and Cultural Competence in Language

- SPAN 111: Elementary Spanish I (3 hrs)
- SPAN 112: Elementary Spanish II (3 hrs)
- SPAN 211: Intermediate Spanish I (3 hrs)
- SPAN 212: Intermediate Spanish II (3 hrs)

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- FLC 401 - Language/Culture/Literature

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (36 hours)
Courses below also satisfy Outcome 6 of the Enduring Foundations General Education program. At least 6 hours of coursework must be taken in the target language in an approved study abroad program. It is highly recommended that student complete more than the six hours minimum.

SPAN 312: Conversation and Composition ( 3 hrs )*must be at UE SPAN 321: Intro to Hispanic Literature ( 3 hrs )* must be at UE

Complete one course from (must be taken at UE):
SPAN 410: Spanish Practical Phonetics (3 hrs)
SPAN 450: Introduction to Spanish Linguistics (3 hrs)
SPAN 458: Introduction to Hispanic Pragmatics (3 hrs)
Complete 12 hours from 300 level Spanish:
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Complete 9 hours from 400 level Spanish:
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-
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Complete a second language through 112 level:
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Free Elective (37 hours)

39 Hours of 300/400 level courses

NOTES

- Majors are required to complete the ACE certificate through career services before the end of their senior year.
- All majors (even double majors or double degrees) must take FLC 401 including the senior portfolio. This course is taught in Englishanddoes notcounttowardsthe 400 -level requirement. The prerequisite for this course is a literature course taken at UE.
- FLC 420 ( $1-3$ credits) and internships abroad as well as in the US will count if they meet the target language requirements.
- A linguistics course taken at UE is required.


## Bachelor of Arts

## SPANISH - MEDICAL SPANISH SPECIALIZATION

2018-2019| 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: Linguistic and Cultural Competence in Language

- SPAN 111: Elementary Spanish I (3 hrs)
- SPAN 112: Elementary Spanish II (3 hrs)
- SPAN 211: Intermediate Spanish I (3 hrs)
- SPAN 212: Intermediate Spanish II (3 hrs)

Outcome 7: (3 hrs) Quantitative Literacy
.
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- FLC 401: Language/Culture/Literature

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (39 hours)
At least 6 hours of coursework must be taken in the target language
inanapprovedstudyabroad program.Itishighly recommendedthat
student complete more than the six hours minimum.
SPAN 312: Conversation and Composition (3 hrs)
SPAN 321: Intro to Hispanic Literature (3 hrs)*must be at UE
SPAN 325: Medical Spanish I (3 hrs)*must be at UE
SPAN 350: Medical Spanish II (3 hrs)*must be at UE
Complete one course from (must be taken at UE):
SPAN 410: Spanish Practical Phonetics (3 hrs)
SPAN 450: Introduction to Spanish Linguistics (3 hrs)
SPAN 458: Introduction to Hispanic Pragmatics (3 hrs)
Complete 3 hours from the following:
COMM 410: Health Communication (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
FLC 420: Foreign Languages and Cultures (1-3 hrs)
HSA 405: Health Care Systems Issues and Trends (3 hrs)
PH 190: Introduction to Public Health (3 hrs)
PH 195: Global Health Issues (3 hrs)
SOC 337: Social Aspects of Health and Health Care (3 hrs)
CHNG course taught by FLC faculty and medical related (3 hrs)
Complete 3 hours from 300-level Spanish:
    .
Complete 12 hours from 400-level Spanish:
    .
    •
    •
    .
Complete a second language through 112-level:
    .
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Free Elective (34 hours)

39 Hours of 300/400 level courses

NOTES

- Majors are required to complete the ACE certificate through career services before the end of their senior year.
- All majors (even double majors or double degrees) must take FLC 401 including the senior portfolio. This course is taught in Englishanddoes notcounttowardsthe400-level requirement. The prerequisite for this course is a literature course taken at UE.
- A linguistics course taken at UE is required.


## Bachelor of Science

## SPANISH EDUCATION

2019-2020 | 130 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language

- SPAN 111: Elementary Spanish I (3 hrs)
- SPAN 112: Elementary Spanish II (3 hrs)

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
.
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- FLC 401 - Language/Culture/Literature

Overlay: Writing Across the Curriculum (4 courses)
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-
-

Major Requirements ( 83 hours)
Professional Education Requirements
PSYC 226 - Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar ( 1 hr )
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School (3 hrs)
EDUC 454: Methods of Teaching Foreign Lang. SH/JH/MS (2 hrs)
Spanish Requirements
SPAN 211: Intermediate Spanish I (3 hrs)
SPAN 212: Intermediate Spanish II (3 hrs)
Complete 15 hours from:
SPAN 312: Conversation and Composition (3 hrs)
SPAN 314: Business Spanish (3 hrs)
SPAN 320: Social Issues in Hispanic Society (3 hrs)
SPAN 321: Introduction to Hispanic Literature (3 hrs)
SPAN 333: Introduction to Hispanic Culture (3 hrs)
SPAN 335: Foreign Language Study Abroad*
SPAN 350: Medical Spanish II (3 hrs)
SPAN 435: Foreign Language Study Abroad*
*SPAN 335 and 435 may repeated with content change.
Complete 12 hours from:
SPAN 410: Spanish Practical Phonetics (3 hrs)
SPAN 411: Advanced Spanish Grammar (3 hrs)
SPAN 433: Hispanic Civilization (3 hrs)
SPAN 438: Spanish Seminar (3 hrs)*
SPAN 450: Introduction to Spanish Linguistics (3 hrs)
SPAN 458: Introduction to Hispanic Pragmatics (3 hrs)
FL 420: Foreign Language Internship (3-6 hrs)
*SPAN 438 may repeated with content change.
Complete a second language through 112 level:
-
-
Elective Credit (5 hours)

39 Hours of 300/400 level courses

# Gender and Women's Studies Minor 

The Gender and Women's Studies minor has two major goals: offer an interdisciplinary program of study in GWS and to promote the understanding of gender and women's issues in an informedcurriculumthatreflects newscholarshipandapplications. Theobjective ofthegender andwomen'sstudies minoristoencouragestudentstoanalyzetheroles, perspectives, and contributions of women and to examine the influences of genderon historic and contemporary life. Throughexaminingwomen'shistory, presentconditions,andfuturepossibilities,studentswillcome to understand how gender is socially constructed. The curriculum consists of three categories of courses:(1) department courses that take women or gender as their primary focus, are based on recentscholarship,areinterdisciplinaryinnature,andareoffereddirectlybythegenderandwomen's studiesprogram;(2)corecoursesofferedbyacademicdepartmentsthattakewomenorgenderastheir primaryfocusandarebasedonrecentscholarship;and(3)affiliatedcourseswhicharenotgenderand women's studies courses but have significant gender and women's studies content.

Harlaxton College in Grantham, England
The British studies course at Harlaxton College includes lectures and seminar discussions on roles of women and othergender-related issues in successiveepochs of British and European history.Theopportunityfortravelandobservationofgenderandwomen'sissues,conditions,and opportunities is rich at Harlaxton.

Gender and Women's Studies Minor (18 hours)
Gender and women's studies minors must pursue a major in a primary discipline.
Curriculum:GenderandWomen'sStudies 101 andfiveadditionalcoursesfrom department,core, andaffiliated courses; at leasttwo ofthefiveadditional courses mustbefrom eitherdepartment or core courses

Department Courses
Gender and Women's Studies 101, 492, 493
New courses meeting the criteria of either core or affiliated may be added for inclusion in the program.Certaindepartmentalspecialtopicscourses,approvedforwomen'sstudies,mayalsobe included withinthecourseofstudy.Thefollowingaretentativeofferings. Pleaseconsulttheclass schedule for current approved offerings.
Core Courses
(See the appropriate department for course descriptions.)
Archaeology 415, Art History 492*, History 320, 380*, 428; Legal Studies 420, Political Science 326, Religion 340, 375, Sociology 335, 435, Spanish 438*.*These courses can be repeated with a change in topic.

## Affiliated Courses

(See the appropriate department for course descriptions.)
History 418, Interdisciplinary 255, Psychology 229, Theatre 395*, English 348*, History 380*, Philosophy 450, Sociology 350, 460, Religion 305.*These courses can be repeated with change in topic.

# History 

Faculty: Byrne, Bujak (Harlaxton), Gahan, Green (Harlaxton), MacLeod (Chair), Parks

Bachelor of Arts<br>with a Major in History

The main objective of study in history is to acquire an understanding and an appreciation of thehistoricalworldinwhichwelive.Historycoursesexplorethepastsothatstudentswill bebetter equippedtoexplainthecomplexitiesoftheworldinourtimethroughexploringthecharacteristics andimpactofeachageinthepast.Theultimategoalistohelpstudentsunderstandtheproblems they face, appreciate the richness of the human experience, and act with reason and judgment.

Students with a degree in history will be proficient in the areas of analysis, critical thinking, findingandusingevidence,andbothwrittenandoralcommunicationskills.Earningthedegree is excellent preparation for graduate studies in history or related fields as well as for law school. Additionally, history majors will also be prepared for careers in diverse areas such as education, business, government, politics, or journalism.

ThesegoalscanalsobeadvancedthroughasemesterofstudyatHarlaxtonCollegeorasimilar studyabroad program.HistorycoursesareofferedeachsemesteratHarlaxton(seewww.harlaxton. evansville.edu). This is a wonderful opportunity not just to study history in class, but also to visit the very sites where many important historical events took place. It is possible, with advanced planning,tospendasemesterabroadandstillcompletealldegreerequirementswithinfouryears.

## History Minor (21 hours)

Seven courses in history (no more than two at the 100 level and at least one at the 400 level)
Students majoring in a variety of disciplines (e.g. business, communication, political science, or pre-law) willfindhistorycourses relevanttotheirstudiesandareencouragedtoconsidertakinga history minor.

## Bachelor of Arts in History Education

Successful completion of this degree qualifies students for teacher certification in Indiana and most other states.

## Bachelor of Science in History Education

Successful completion of this degree qualifies students for teacher certification in Indiana and most other states.

## Bachelor of Arts

## HISTORY

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
.
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
Complete courses or proficiency through the 212 level.
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-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- HIST 490 - Senior Seminar in History

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (36 hours)
HIST 290: Approaches to History (3 hrs)
Complete 9 hours of HIST

- No more than 6 hrs from 100 level courses
- No more than 3 hours from HIST 492

Complete 9 hours from:
HIST 311: The Greeks and the East (3 hrs)
HIST 312: The Evolution of Rome (3 hrs)
HIST 313: Medieval Europe 410-1350 (3 hrs)
HIST 314: Renaissance and Reformations: Europe 1350-1648 (3 hrs)
HIST 317: Europe 1800-1890 (3 hrs)
HIST 318: The First World War (3 hrs)
HIST 319: Second World War (3 hrs)
HIST 320: Women's Lives Before Modern Age (3 hrs)
HIST 321: Islam/West in Middle Ages (3 hrs)
HIST 322: French Revolution (3 hrs)
HIST 324: Modern China \& Japan Fr 1660 (3 hrs)
HIST H378: Britain and Mid East to 1922 (3 hrs)
HIST H379: Africa and British Imperialism (3 hrs)
HIST 381: Modern Britain 1815-Present (3 hrs)
HIST 383: Modern Scotland, 1707-Today (3 hrs)
HIST 385: Ireland and the Irish Diaspora (3 hrs)
HIST 418: War, Politics, \& Gender (3 hrs)
HIST 438: War, Death, Memory 1914-39 (3 hrs)
HIST 450: Decolonization Africa 1919-90 (3 hrs)
Complete 9 hours from:
HIST 323: US \& Middle East 1919-Present (3 hrs)
HIST 340: Crime/Punishment/Law in Early Amer (3 hrs)
HIST 341: Class, Comm, Race Col N Amer (3 hrs)
HIST 343: Civil War \& Reconstruction (3 hrs)
HIST 344: The American Revolution (3 hrs)
HIST 345: US Foreign Policy Since 1776 (3 hrs)
HIST 348: Great Crash / Depression (3 hrs)
HIST 349: Cold War America: 1945-1990 (3 hrs)
HIST 351: Atlantic World Since 1492 (3 hrs)
HIST 354: History of the Caribbean to 1900 (3 hrs)
HIST 428: Family Conflict 19th Century America (3 hrs)
HIST 429: Rural Life Europe/North America (3 hrs)
Complete 6 hours from 400 level HIST (may not include HIST 490 or 492)
-

Free Electives (37 hours)

39 Hours of $300 / 400$ level courses

## Bachelor of Arts

## HISTORY - EDUCATION

2018-2019 | 128 Hours Required
Enduring Foundations General Education Requirements (47 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

- HIST 111, HIST 112, HIST 141, or HIST 142

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
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-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- HIST 490: Senior Seminar in History

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (72 hours)
Professional Education Requirements
PSYC 226: Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)

EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar ( 1 hr )
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School (3 hrs)
EDUC 461 Methods of Teaching Social Studies SH/JH/MS (2 hrs)
History Requirements
HIST 290: Approaches to History (3 hrs)
Complete one course from:
HIST 141: American History to 1865 (3 hrs)
HIST 142: American History since 1865 (3 hrs)
Complete one course from:
HIST 111: World History to 1500 (3 hrs)
HIST 112: World History since 1500 (3 hrs)
Complete three courses from:
HIST 313: Medieval Europe 410-1350 (3 hrs)
HIST 314: Modern West: Europe 1350-1648 (3 hrs)
HIST 317: Europe 1800-1890 (3 hrs)
HIST 318: The First World War (3 hrs)
HIST 319: Second World War (3 hrs)
HIST 320: Women's Lives Before Modern Age (3 hrs)
HIST 321: West/Islam in Middle Ages (3 hrs)
HIST 322: French Revolution (3 hrs)
HIST 324: Modern China \& Japan Fr 1660 (3 hrs)
HIST H378: Britain and Mid East to 1922 (3 hrs)
HIST H379: Africa and British Imperialism (3 hrs)
HIST 381: Modern Britain 1815-Present (3 hrs)
HIST 383: Modern Scotland, 1707-Today (3 hrs)
HIST 418: War, Politics, \& Gender (3 hrs)
HIST 438: War, Death, Memory 1914-39 (3 hrs)
HIST 450: Decolonization Africa 1919-90 (3 hrs)
HIST 482: Ireland 1700-1925 (3 hrs)
Complete three courses from:
HIST 323: US \& Middle East 1919-Present (3 hrs)
HIST 341: Class, Comm, Race Col N Amer (3 hrs)
HIST 343: Civil War \& Reconstruction (3 hrs)
HIST 345: US Foreign Policy Since 1776 (3 hrs)
HIST 348: Great Crash / Depression (3 hrs)
HIST 349: Cold War America: 1945-1990 (3 hrs)
HIST 352: Dictatorship/Democracy Latin America (3 hrs)
HIST 353: Mexico: Conquest to Present (3 hrs)
HIST 448: Mexican Revolution, 1911-1917 (3 hrs)
Complete 6 hours from 400 level HIST (may not include HIST 490 or 492).
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Social Studies Concentration
History Education majors must complete a concentration in either
Economics, Political Science, Psychology, Sociology, or General
Social Studies. Complete one of the following:
Economics
ECON 101: Principles of Macroeconomics (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
ECON 300/400 level elective (3 hrs)
Political Science
PSCI 100: World Politics (3 hrs) or
PSCI 160: Intro to International Relations (3 hrs)
PSCI 143: American National Government and Politics (3 hrs)

PSCI 300/400 level elective (3 hrs)
Psychology
PSYC 121: Introduction to Psychology (3 hrs) or
PSYC 226: Child \& Adolescent Psychology (3 hrs)
PSYC 229: Social Psychology (3 hrs)
PSYC 259: Abnormal Psychology (3 hrs)

Sociology
SOC 105: Introduction to Sociology (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
SOC 300/400 level elective (3 hrs)

General Social Studies
Complete one course from three of the four disciplines:

1. Economics

ECON 101: Principles of Macroeconomics (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
ECON 300/400 elective (3 hrs)
2. Political Science

PSCI 100: World Politics (3 hrs)
PSCI 143: American National Government and Politics (3 hrs)
PSCI 160: Intro to International Relations (3 hrs)
Any 300/400 PSCl elective (3 hrs)
3. Psychology

PSYC 121: Introduction to Psychology (3 hrs)
PSYC 226: Child \& Adolescent Psychology (3 hrs)
PSYC 229: Social Psychology (3 hrs)
PSYC 259: Abnormal Psychology (3 hrs)

## 4. Sociology

SOC 105: Introduction to Sociology (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
Any 300/400 SOC elective (3 hrs)

39 Hours of 300/400 level courses

## Bachelor of Science

## HISTORY EDUCATION

2019-2020 | 122 Hours Required
Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

- HIST 111, HIST 112, HIST 141, or HIST 142

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
.

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- HIST 490: Senior Seminar in History

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (78 hours)
Professional Education Requirements
PSYC 226 - Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar (1 hr)

EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School
(3 hrs)
EDUC 461 Methods of Teaching Social Studies SH/JH/MS (2 hrs)
History Requirements
HIST 290: Approaches to History (3 hrs)
Complete one course from:
HIST 141: American History to 1865 (3 hrs)
HIST 142: American History since 1865 (3 hrs)
Complete one course from:
HIST 111: World History to 1500 (3 hrs)
HIST 112: World History since 1500 (3 hrs)
Complete three courses from:
HIST 313: Medieval Europe 410-1350 (3 hrs)
HIST 314: Modern West: Europe 1350-1648 (3 hrs)
HIST 317: Europe 1800-1890 (3 hrs)
HIST 318: The First World War (3 hrs)
HIST 319: Second World War (3 hrs)
HIST 320: Women's Lives Before Modern Age (3 hrs)
HIST 321: West/Islam in Middle Ages (3 hrs)
HIST 322: French Revolution (3 hrs)
HIST 324: Modern China \& Japan Fr 1660 (3 hrs)
HIST H378: Britain and Mid East to 1922 (3 hrs)
HIST H379: Africa and British Imperialism (3 hrs)
HIST 381: Modern Britain 1815-Present (3 hrs)
HIST 383: Modern Scotland, 1707-Today (3 hrs)
HIST 418: War, Politics, \& Gender (3 hrs)
HIST 438: War, Death, Memory 1914-39 (3 hrs)
HIST 450: Decolonization Africa 1919-90 (3 hrs)
HIST 482: Ireland 1700-1925 (3 hrs)
Complete three courses from:
HIST 323: US \& Middle East 1919-Present (3 hrs)
HIST 341: Class, Comm, Race Col N Amer (3 hrs)
HIST 343: Civil War \& Reconstruction (3 hrs)
HIST 345: US Foreign Policy Since 1776 (3 hrs)
HIST 348: Great Crash / Depression (3 hrs)
HIST 349: Cold War America: 1945-1990 (3 hrs)
HIST 352: Dictatorship/Democracy Latin America (3 hrs)
HIST 353: Mexico: Conquest to Present (3 hrs)
HIST 448: Mexican Revolution, 1911-1917 (3 hrs)
6 hours from 400 level HIST. May not include HIST 490 or 492.
-
Social Studies Concentration
History Education majors must complete a concentration in either
Economics, Political Science, Psychology, Sociology, or General
Social Studies. Complete one of the following:
Economics
ECON 101: Principles of Macroeconomics (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
ECON 300/400 level elective (3 hrs)

Political Science
PSCI 100: World Politics (3 hrs) or
PSCI 160: Intro to International Relations (3 hrs)
PSCI 143: American National Government and Politics (3 hrs)

PSCI 300/400 level elective (3 hrs)
Psychology
PSYC 121: Introduction to Psychology (3 hrs) or
PSYC 226: Child \& Adolescent Psychology (3 hrs)
PSYC 229: Social Psychology (3 hrs)
PSYC 259: Abnormal Psychology (3 hrs)

Sociology
SOC 105: Introduction to Sociology (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
SOC 300/400 level elective (3 hrs)

General Social Studies
Complete one course from three of the four disciplines:

1. Economics

ECON 101: Principles of Macroeconomics (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
ECON 300/400 elective (3 hrs)
2. Political Science

PSCI 100: World Politics (3 hrs)
PSCI 143: American National Government and Politics (3 hrs)
PSCI 160: Intro to International Relations (3 hrs)
Any 300/400 PSCl elective (3 hrs)
3. Psychology

PSYC 121: Introduction to Psychology (3 hrs)
PSYC 226: Child \& Adolescent Psychology (3 hrs)
PSYC 229: Social Psychology (3 hrs)
PSYC 259: Abnormal Psychology (3 hrs)

## 4. Sociology

SOC 105: Introduction to Sociology (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
Any 300/400 SOC elective (3 hrs)

39 Hours of 300/400 level courses

## Interdisciplinary Studies

## Bachelor of Arts or Bachelor of Science with a Major in Interdisciplinary Studies

The interdisciplinary studies major allows students moreflexibility in designing their major than any other program. Within an interdisciplinary studies major, students select courses that eithermorepreciselymeettheirprofessionalorpersonaleducational goalsoranticipatefuture trends in employment markets.

Aninterdisciplinarystudiesmajorconsists ofanintegratedseriesofcoursesselectedfromatleast twoestablishedUniversityacademicdisciplines.Anadvisorfromeachacademicdisciplinewillbe assignedtothestudent, withoneprimaryadvisorchosenbytheadvisorsineachdisciplineandthe student.Studentswilldevise, inconsultation withtheiracademicadvisors,anacademic program suitedtoanarea ofspecialinterest.Becausethestudentmustbeinvolvedin planningthismajor, thestudentwillneedtothinkcriticallyaboutpersonaland professionalgoalsandarticulatereasons forpursuingthis major.Although in principleanyarea ofacademicinvestigationmayconstitute the subjectofaninterdisciplinary studies major,such a major would ordinarily bedefinedinone of three ways:

- An area of the world, geographically, politically, or culturally prescribed, such as American Studies, Latin American Studies, Asian Studies, European Studies, British Studies;
- A period oftime in history ofsome part of the world such as the Enlightenment, the Renaissance, the Middle Ages; or
- A specific problem that is treated in several disciplines such as the concept of social justice, revolutionary movements, and the concept of energy.

The minimum credit requirement for a major in interdisciplinary studies is 39 hours selected fromtwoestablishedacademicdisciplines.Itisdesirableforthestudenttoselectapproximately 20 hoursfrom each discipline, butatleast 15 hours must come fromeach discipline.Morethan two establishedacademic disciplines maybechosen, butatleast 15 hours mustbeearnedfromeach discipline chosen. Of the total hours earned in each discipline, at least 9 hours must be in upper divisioncourses(i.e.,300-or400-levelcourses), andthetotalnumberofupperdivisionhoursmust beatleast 24 . Courses from each discipline may bechosen in consultation with advisors to meet personal and professional goals of the student. Courses shouldfulfilltheUniversity of Evansville writing requirements, andthe proposalshouldaddresstheUniversity'slearningobjectives.University GeneralEducation requirementsmustbesatisfied with coursesoutsideanyofthechosen disciplines, withtheexceptionsofforeignlanguageandtheseniorseminar.Eachcandidateforabachelor's degree with a major in interdisciplinarystudies must havea GPA of at least 2.0 in the 39 hours of interdisciplinary studies major courses as well as a 2.0 GPA overall.
Studentstakingtheinterdisciplinarystudiesmajorwillpreparealistofcoursestobecompletedand alettertotheInterdisciplinaryStudiessubcommittee.Theletterwillincludethestudent'spersonal andprofessional goalsanddescribehowtheinterdisciplinarystudiesmajorwillenablethestudent to attain those goals. The letter also will identify the student's advisors. The subcommittee will reviewtheletterandthecourseplanandeitherapproveordisapprovetheplan.Thesubcommittee recommendsthattheapplicationfortheinterdisciplinarystudiesmajorbecompletedbytheendof thesophomoreyeartoensurethatsufficienttimeisleftforsuccessfulcompletionofthemajor.The InterdisciplinaryStudiesSubcommitteehasfinalsayontheintegrityoftheproposedmajorandmay choosenottoconsiderproposalssubmittedaftertheend ofthesophomoreyear.Thestudentmay appeal the decision of the subcommittee regarding approval of a plan and review of a plantothe Admissions and Standards Committee.
The list of courses developed by the student and the advisors may include a list of courses from which the student will complete the requirements for that discipline rather than an exhaustive list of courses. For example, the list of courses from a discipline may include courses that total 24 credits, and the student must complete at least 15 credits from that list. This allows for some flexibility in scheduling without requiring a formal modification to the plan. After the plan is approvedbythesubcommitteeandfiled withtheRegistrar, anydeviationsfromtheplan require approval by the subcommittee.

## 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

## Additional foreign language

- 6hours:BachelorofArts requires proficiencyinorcompletion of a foreign language through the course numbered 212
An interdisciplinary studies major consists of an integrated series of coursesselectedfromatleasttwoestablishedUniversityacademicdisciplines.Anadvisorfromeachacademicdisciplinewillbeassignedtothe student, withone primaryadvisorchosen bytheadvisors ineach discipline and the student. Students will devise, in consultation with their academic advisors, an academic program suited to an area of special interest.Becausethestudentmustbeinvolvedinplanningthismajor, thestudentwillneedtothinkcriticallyaboutpersonalandprofessional goals andarticulatereasonsforpursuingthismajor.Althoughinprincipleanyarea ofacademicinvestigationmayconstitutethesubjectof an interdisciplinary studies major, such a major would ordinarily be defined in one of three ways:
- An area of the world, geographically, politically, or culturally prescribed, such as American Studies, Latin American Studies, Asian Studies, European Studies, British Studies;
- A period of time in history of some part of the world such as the Enlightenment, the Renaissance, the Middle Ages; or
- A specific problem that is treated in several disciplines such as theconceptofsocialjustice,revolutionarymovements, andthe concept of energy.

Theminimumcreditrequirementforamajorininterdisciplinarystudiesis 39 hoursselectedfromtwoestablishedacademicdisciplines. Itis desirablefor the student to select approximately 20 hours from each discipline,butatleast 15 hoursmustcomefromeach discipline.More thantwoestablishedacademicdisciplinesmaybechosen,butatleast15 hours mustbe earned from each discipline chosen. Ofthetotal hours earned in each discipline, at least 9 hours must be in upper division courses (i.e., 300 -or 400 -levelcourses), and the total number ofupper divisionhoursmustbeatleast24.Coursesfromeachdisciplinemaybe choseninconsultationwithadvisorstomeetpersonaland professional goals ofthestudent.CoursesshouldfulfilltheUniversity of Evansville writing requirements,andtheproposalshouldaddresstheUniversity's learningobjectives.University GeneralEducation requirementsmust besatisfiedwithcoursesoutsideany ofthechosendisciplines, withthe
exceptionsofforeignlanguageandtheseniorseminar.Eachcandidatefor a bachelor's degree with a major in interdisciplinary studies must have a GPA of at least 2.0 in the 39 hours of interdisciplinary studies major courses as well as a 2.0 GPA overall.

Students taking the interdisciplinary studies major will prepare a list ofcoursestobecompletedandalettertotheInterdisciplinaryStudies subcommittee. The letter will include the student's personal and professionalgoalsanddescribehowtheinterdisciplinarystudiesmajorwill enable the student to attain those goals. The letter also will identify thestudent'sadvisors.Thesubcommitteewillreviewtheletterandthe course plan and either approve or disapprove the plan. The subcommitteerecommendsthattheapplicationfortheinterdisciplinarystudies major be completed bytheend of the sophomore year to ensure that sufficient time is left for successful completion of the major. The InterdisciplinaryStudies Subcommittee hasfinal say on the integrity ofthe proposedmajorandmaychoosenottoconsiderproposalssubmitted aftertheend ofthesophomoreyear.Thestudentmayappealthedecisionofthe subcommitteeregarding approval ofaplanandreviewofa plan to the Admissions and Standards Committee.

The list of courses developed by the student and the advisors may include a list of courses from which the student will complete the requirements for that discipline rather than an exhaustive list of courses. Forexample, thelist ofcoursesfromadisciplinemay include courses that total 24 credits, and the student must complete at least 15 credits from that list. This allows for some flexibility in scheduling without requiring a formal modification to the plan. After the plan is approvedbythesubcommitteeandfiled withtheRegistrar,anydeviations from the plan require approval by the subcommittee.

## International Studies

Faculty: Kim

## Bachelor of Arts <br> with a Major in International Studies

International studiesis aninterdisciplinarymajorthatrestsontheunderstandingthattwen-ty-first century problems and careers are not restricted to single disciplines. Each student has uniquetalents, desires, needs, andcareergoalsthatneednotbeforcedintotraditionalacademic boundaries. The curriculum offers a strong foundation in international affairs, political science, economics, and foreign languages and cultures.

## Study/Internship Abroad

Eachmajormuststudy abroadforonesemesterorcompleteatleastasemester-long internshiporworkexperienceapproved bythedirector.Ifthestudentchoosesasemesterofstudy, an academicloadof12semesterhoursmustbecompleted.Ninesemesterhoursofthisworkshould be upper-division courses approved in advance by the director. A semester at Harlaxton or the University of Evansville's summer programs in Asia, Latin America, or the Middle East can satisfy this requirement.

International Studies Minor (18 hours)
One from Political Science 100 or 160; one from Political Science 361, 362, 363, 369, 435, 461; one from Political Science 320, 360, 380, H385, 459, 461, 489

Three courses, in consultation with the director, from anthropology, archaeology, history, modernforeignlanguagesandcultures,religion, andworldliterature;nomorethantwo courses may be taken from any one subject; British Studies 282 or 382 (Harlaxton) may substitute for two courses toward this requirement

## Bachelor of Arts

## INTERNATIONAL STUDIES

2019-2020 | 120 Hours Required

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Enduring Foundations General Education Requirements
(47 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking
- FYS 112 or 312 First Year Seminar
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Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
.
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
Complete courses or proficiency through the 212 level.
-
-
-
.
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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-
-
-

Major Requirements (48 Hours)
In addition to course requirements, majors must study abroad for one semester or complete a semester-long internship.
ECON 101: Principles of Macroeconomics (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
PSCI 100: World Politics (3 hrs)
PSCI 160: Intro International Relations (3 hrs)
Complete one course from:
QM 227: Introduction to Statistics (3 hrs)
PSCI 318: Research Methods in Political Science (3 hrs)
SOC 343: Social Research Methods (3 hrs)
Complete two courses from:
PSCI 320: Comparative Politics Seminar (3 hrs)
PSCI 360: Politics of the Middle East (3 hrs)
PSCI 361: U.S. Foreign Policy (3 hrs)
PSCl 362: International Security (3 hrs)
PSCI 363: Int'I Law \& Organization (3 hrs)
PSCI 369: Terrorism and Counterterrorism (3 hrs)
PSCI 380: Latin American Politics (3 hrs)
PSCI H385: Modern British Politics (3 hrs)
PSCI 390: Topics in Politics (3 hrs)
PSCI 435: Human Rights Seminar (3 hrs)
PSCl 459: Asian Politics (3 hrs)
PSCI 461: Politics of Global Economy (3 hrs)
PSCI 489: European Politics (3 hrs)
PSCl 490: Topics in Politics (3 hrs)

## Area Concentration - 9 hours from one area

See specific course options for each area concentration on the following page.
Europe Concentration
Asia Concentration
Latin America Concentration
Africa Concentration

## LANGUAGE REQUIREMENTS

Complete three years of college-level competency in one foreign language or two years of college-level competency in two foreign languages.

## ADDITIONAL MAJOR REQUIREMENTS <br> Complete one of the following: <br> BRIT 282 and BRIT 382: The British Experience <br> 6 hours from two different subjects.

Free Electives (25 hours)

39 Hours of 300/400 level courses

## AREA CONCENTRATIONS

Complete 9 hrs from one area. No more than two courses may be selected from one area and courses used to satisfy the core requirement may not be used to satisfy the area concentration.

## Europe Concentration

PSCI 320: Comparative Politics Seminar (3 hrs)
PSCI 489: European Politics (3 hrs)
FL 401: Language/Culture/Literature (3 hrs)
FREN 434: French Civilization (3 hrs)
GERM 335: Foreign Language Study Abroad
GERM 433: German Civilization (3 hrs)
HIST 312: The Evolution of Rome (3 hrs)
HIST 313: Medieval Europe 410-1350 (3 hrs)
HIST 314: Modern West: Europe 1350-1648 (3 hrs)
HIST 317: Europe 1800-1890 (3 hrs)
HIST 322: French Revolution (3 hrs)
HIST 381: Modern Britain 1815-Present (3 hrs)
HIST 383: Modern Scotland, 1707-Today (3 hrs)
HIST 385: Ireland and the Irish Diaspora (3 hrs)
RUSS 333: Russian Culture (3 hrs)
RUSS 334: Soviet and Post-Soviet Russian Civilization (3 hrs)
COMM 380: Intercultural Communication (3 hrs)
SOC 415: Globalization and Environment (3 hrs)

## Asia Concentration

PSCI 320: Comparative Politics Seminar (3 hrs)
PSCI 360: Politics of the Middle East (3 hrs)
PSCl 459: Asian Politics (3 hrs)
FL 401: Language/Culture/Literature (3 hrs)
COMM 380: Intercultural Communication (3 hrs)
SOC 415: Globalization and Environment (3 hrs)
HIST 321: West/Islam in Middle Ages (3 hrs)
HIST 323: US \& Middle East 1919-Present (3 hrs)
HIST 324: Modern China \& Japan Fr 1660 (3 hrs)
JAPN 333: Japanese Culture (3 hrs)
REL 314: Religions of East Asia (3 hrs)
Latin America Concentration
PSCI 320: Comparative Politics Seminar (3 hrs)
PSCI 380: Latin American Politics (3 hrs)
FL 401: Language/Culture/Literature (3 hrs)
COMM 380: Intercultural Communication (3 hrs)
SOC 415: Globalization and Environment (3 hrs)
HIST 354: History of the Caribbean to 1900 (3 hrs)
SPAN 333: Introduction to Hispanic Culture (3 hrs)
SPAN 433: Hispanic Civilization (3 hrs)

Africa Concentration
PSCI 320: Comparative Politics Seminar (3 hrs)
FL 401: Language/Culture/Literature (3 hrs)
COMM 380: Intercultural Communication (3 hrs)
SOC 415: Globalization and Environment (3 hrs)
ANTH 319: Peoples of Africa (3 hrs)
ARCH 207: Introduction to Egyptian Archaeology (3 hrs)
HIST 450: Decolonization Africa 1919-90 (3 hrs)

> Bachelor of Arts or Bachelor of Science with a Major in Criminal Justice

> Bachelor of Arts or Bachelor of Science with a Major in Political Science Bachelor of Arts or Bachelor of Science with a Major in Sociology specialization in AnthropologyorGerontology available

The Department of Law, Politics, and Society offers Bachelor of Arts and Bachelor of Science degrees with majors in criminal justice, political science, and sociology with specializations in anthropology, generalsociology, andgerontology.Inaddition, thedepartmentoffersaminorsin anthropology,criminaljustice,legalstudies, politicalscience, pre-professionalsocialwork,social andhumanservices, andsociologyandacertificateingerontology.Students are requiredtoearn at leasta C -in all courses required forthe major and minor. The departmentalsoadvises pre-law students.

The criminal justice degree is designed for students who intend to work in a justice-related field such as private security, law enforcement, the courts, institutional or community corrections, or the juvenilejustice system. The degreealso prepares students forgraduate workin the socialsciencesorforlawschool-especiallyinthearea ofcriminallaw.Inadditiontocoveringthe majorcomponents ofthesystem, courserequirementsforthedegreealsoincludecriminological and sociological theory and the sociology research sequence.

PoliticalScienceisanacademicdisciplinethatseekstounderstandtheexerciseofpowerina variety of settings. The discipline is organized into four main areas of study, or subfields such as American Politics, Comparative Politics, International Relations, and Political Theory. Political Sciencemakesstudentsgoodcandidatesforajobinalmostanyarea, includingbusiness,finance, consulting, government work, the foreign service, and teaching. Political Science is also a good credential forthosewho plantoapplyforgraduateeducation inlaw, business, social work,education, international affairs, political science itself, or other social sciences.

Sociologyandanthropologyarebehavioralsciencesthatdescribeandexplainsocialbehavior, whilegerontologyisanoccupationinwhichknowledgefromthebehavioralsciencesisapplied to societal needs in aging, public health, and the life course.

Sociologistsstudy howbehavior is influenced byour social environment, includingtheinformal groups and larger social organizations to which we belong. Anthropologists study cultural diversityinsocietiesaroundtheworld.Sociologists,anthropologists,andgerontologistsstudysuch diversetopicsasdeviantbehaviorandcrime,environmentalstudies,familyrelatedissues,aging, and health care. The knowledge developed is widely used in social planning and business.

The study of sociology and anthropology prepares students for a wide range of occupations in industry and government. Sociology and anthropology are excellent majors for individuals fascinated by groups and the social behavior of people. Sociology and anthropology majors are well-preparedtopursuegraduateworkinsociology,socialworkandcounseling,criminaljustice, law,publichealth,communityoutreach,culturalresourcemanagement,non-profitandgovernmental agencies, human resources and public relations, and research and data analysis. Career advancement in social work requires a master's degree, and the program is designed to provide students with the knowledge base required by social work graduate programs.

## Internships

Internships are available to majors of junior or senior standing who have completed the core courses.Whileinternshipsarerecommendedforallsociologymajors, certainGPA requirements mustbemet, andstudentsmustfileaninternshipapplicationwiththeiradvisor.Formoredetails, please consult the Sociology Student Handbook.

## Minors

Students majoring in such disciplines as business, publichealth, communication, nursing, psychology, political science, pre-law, or history will find departmental courses relevant to their studies and are encouraged to pursue one of the minors of the department.
Anthropology Minor (18 hours)
Anthropology 200, 207 and 12 additional credits of anthropology courses.

## Criminal Justice Minor (18 hours)

Criminal Justice 205, 210 plus any four additional criminal justice courses.
Legal Studies Minor (18 hours)
Legal Studies 125 and 345, two courses from Criminal Justice 342 (or Legal Studies 343), Law 201, or Political Science 363, and six hours selected in consultation with the Legal Studies advisor.
Political Science Minor (18 hours)
Political Science 100, 143, 160; Political Science 376; one course from Political Science 320, 360, 361, 362, 363, 369, 380, 435, 459, 461, 489; one course from Political Science 312, 313, 326, 343, 344, 345, 349.

## Sociology Minor (18 hours)

Sociology 105, 230 plus 12 additional credits of sociology courses;
Anthropology 453 is also an option.
Gerontology Certificate (12 hours)
Four courses from: Gerontology 225, 401, 403, 405, 407, or 496.
A Gerontology Certificate is awarded following completion of a prescribedcourse ofstudy ingerontology.Acertificatemaybeearned by professionals who are already involved in their careers or by current students as a part oftheir bachelor's degree. In pastyears, students in nursing, sociology, social work, music therapy, physical therapy, pre-medicine,andpsychologyhavetakenadvantageofthisopportunity tolearnaboutaging.CompletingaGerontologyCertificaterequires 12 hoursofinterdisciplinarycoursework.Asarule,threecoursemodules areofferedeachsemester, includingduringthe 10-weeksummersession.

TofindoutmoreabouttheGerontologyCertificateprogramcontactDr. MariPlikuhn,DirectoroftheGerontologyCenteratmp168@evansville. edu.

Pre-law Advising
Studentsplanningtoenterthelegal professionareadvisedtopursue baccalaureatedegreesinacademicareasbestsuitedtotheirinterests. Law schools are most interested in students who can communicate effectively, read comprehensively, and think critically. Because admissionrequirementsoflawschoolsvary,studentsneedtobecome acquainted with the admission process of the schools they hope to attend.

Study in English, economics, foreign language, history, legal studies, logicand philosophy, mathematics, political science, andsociology is recommended. Most law schools do not require a specific pattern of courses, nordotheystipulatemajorsforconcentratedstudy;however, students mustselectanundergraduatemajorandcompleterequirements for that major in order to graduate. A course of study should be carefully planned with the pre-law advisor and the Law School Admission Test should be taken in conjunction with application to law school. For more information, contact the pre-law advisor, Dr. Kevin Gray.

## Bachelor of Arts

## CRIMINAL JUSTICE

## 2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (47 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- SOC 105: Intro to Sociology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- CJ 450: Senior Seminar in Criminal Justice (or SOC 450)

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (39 hours)
CJ 205: Intro to Criminal Justice (3 hrs)
CJ 210: Deviance and Crime (3 hrs)
CJ 360: The Correctional System (3 hrs)
CJ 370: The Police (3 hrs)
CJ 410: Juvenile Delinquency (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
SOC 343: Social Research Methods (4 hrs)
SOC 344: Introduction to Behavioral Statistics (4 hrs)
SOC 438: Race and Ethnic Relations (3 hrs)
Complete one course from:
SOC 327: Human Behavior/Social Environment (3 hrs)
PSYC 229: Social Psychology (3 hrs)
Complete one course from:
CJ 342: Criminal Law (3 hrs)
CJ 380: Courts and Justice (3 hrs)
Complete two courses from (minimum 4 hrs ):
CJ 342: Criminal Law (3 hrs)
CJ 380: Courts and Justice (3 hrs)
CJ 301: Special Topics - Criminal Justice (3 hrs)
CJ 354: Intro to Forensic Science (3 hrs)
CJ 420: International Crime and Justice (3 hrs)
CJ 440: Criminal Justice Ethics (3 hrs)
CJ 496: Internship (1-6 hrs)
PSYC 320: Psych and the Law (3 hrs)
Free Electives (34 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## CRIMINAL JUSTICE

## 2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: ( 6 hrs ) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- SOC 105: Intro to Sociology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- CJ 450: Senior Seminar in Criminal Justice (or SOC 450)

Overlay: Writing Across the Curriculum (4 courses)
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-

Major Requirements (39 hours)
CJ 205: Intro to Criminal Justice (3 hrs)
CJ 210: Deviance and Crime (3 hrs)
CJ 360: The Correctional System (3 hrs)
CJ 370: The Police ( 3 hrs )
CJ 410: Juvenile Delinquency (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
SOC 343: Social Research Methods (4 hrs)
SOC 344: Introduction to Behavioral Statistics (4 hrs)
SOC 438: Race and Ethnic Relations (3 hrs)
Complete one course from:
SOC 327: Human Behavior/Social Environment (3 hrs)
PSYC 229: Social Psychology (3 hrs)
Complete one course from:
CJ 342: Criminal Law (3 hrs)
CJ 380: Courts and Justice (3 hrs)
Complete two courses from (minimum 4 hrs ):
CJ 342: Criminal Law (3 hrs)
CJ 380: Courts and Justice (3 hrs)
CJ 301: Special Topics - Criminal Justice (3 hrs)
CJ 354: Intro to Forensic Science (3 hrs)
CJ 420: International Crime and Justice (3 hrs)
CJ 440: Criminal Justice Ethics (3 hrs)
CJ 496: Internship (1-6 hrs)
PSYC 320: Psych and the Law (3 hrs)
Free Electives (40 hours)

39 Hours of 300/400 level courses

## Bachelor of Art

## POLITICAL SCIENCE

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements (47 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language.
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- PSCI 495: Senior Seminar in Political Science

Overlay: Writing Across the Curriculum (4 courses)
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-

Major Requirements (36 hours)
PSCI 100: World Politics (3 hrs)
PSCI 143: American Nat'I Govt \& Politics (3 hrs)
PSCI 160: Intro International Relations (3 hrs)
PSCI 318: Research Methods in Political Science (3 hrs)
PSCI 376: History of Contemporary Political Thought (3 hrs)
PSCI 495: Senior Seminar Political Science (3 hrs)
Complete 3 hours from - American Politics:
PSCI 312: Political Parties/Elections (3 hrs)
PSCI 313: Congress \& Legislative Process (3 hrs)
PSCI 326: Women \& American Politics (3 hrs)
PSCI 343: Politics \& the Media (3 hrs)
PSCI 344: Political Opinion \& Behavior (3 hrs)
PSCI 345: American Constitutional Law (3 hrs)
PSCI 349: State \& Local Government (3 hrs)
Complete 3 hours from International Relations:
PSCI 361: U.S. Foreign Policy (3 hrs)
PSCI 362: International Security (3 hrs)
PSCl 363: Int'l Law \& Organization (3 hrs)
PSCI 369: Terrorism and Counterterrorism (3 hrs)
PSCI 435: Human Rights Seminar (3 hrs)
PSCI 440: Environmental Law \& Policy (3 hrs)
PSCI 461: Politics of Global Economy (3 hrs)
Complete 3 hours from - Comparative Politics:
PSCI 320: Comparative Politics Seminar (3 hrs)
PSCI 360: Politics of the Middle East (3 hrs)
PSCI 380: Latin American Politics (3 hrs)
PSCI H385: Modern British Politics (3 hrs)
PSCl 459: Asian Politics (3 hrs)
PSCI 489: European Politics (3 hrs)
Political Science Electives (9 hours)
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-
-
Free Electives (37 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## POLITICAL SCIENCE

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: ( 6 hrs ) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
.
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- PSCI 495: Senior Seminar in Political Science

Overlay: Writing Across the Curriculum (4 courses)
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-

Major Requirements (36 hours)
PSCI 100: World Politics (3 hrs)
PSCI 143: American Nat'I Govt \& Politics (3 hrs)
PSCI 160: Introduction to International Relations (3 hrs)
PSCI 318: Research Methods in Political Science (3 hrs)
PSCI 376: History of Contemporary Political Thought (3 hrs)
PSCI 495: Senior Seminar Political Science (3 hrs)
Complete 3 hours from - American Politics:
PSCI 312: Political Parties/Elections (3 hrs)
PSCI 313: Congress \& Legislative Process (3 hrs)
PSCI 326: Women \& American Politics (3 hrs)
PSCI 343: Politics \& the Media (3 hrs)
PSCI 344: Political Opinion \& Behavior (3 hrs)
PSCI 345: American Constitutional Law (3 hrs)
PSCI 349: State \& Local Government (3 hrs)
Complete 3 hours from International Relations:
PSCI 361: U.S. Foreign Policy (3 hrs)
PSCI 362: International Security (3 hrs)
PSCI 363: Int'I Law \& Organization (3 hrs)
PSCI 369: Terrorism and Counterterrorism (3 hrs)
PSCI 435: Human Rights Seminar (3 hrs)
PSCI 440: Environmental Law \& Policy (3 hrs)
PSCI 461: Politics of Global Economy (3 hrs)
Complete 3 hours from - Comparative Politics:
PSCI 320: Comparative Politics Seminar (3 hrs)
PSCI 360: Politics of the Middle East (3 hrs)
PSCI 380: Latin American Politics (3 hrs)
PSCI H385: Modern British Politics (3 hrs)
PSCI 459: Asian Politics (3 hrs)
PSCI 489: European Politics (3 hrs)
Political Science Electives (9 hours)
-
-
-
Free Electives (43 hours)

39 Hours of 300/400 level courses

## Bachelor of Arts

## SOCIOLOGY

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements (47 hours)*
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Uutcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- SOC 105: Intro to Sociology (min. grade of C- required)*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- SOC 450: Senior Seminar in Sociology

Overlay: Writing Across the Curriculum (4 courses)
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-
-
-
Major Requirements (43 hours)*
SOC 105: Intro to Sociology (3 hrs)*
ANTH 207: Cultural Anthropology (3 hrs)
SOC 201: Professional Development Sociology ( 1 hr )
SOC 210: Deviance and Crime (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
SOC 343: Social Research Methods (4 hrs)
SOC 344: Introduction to Behavioral Statistics (4 hrs)

> SOC 390: Principles of Sociological Theory ( 3 hrs )
> SOC 438: Race and Ethnic Relations (3 hrs)
> SOC 496: Internship ( 1 hr ) OR
> SOC 497: Internship in Teaching Sociology ( 1 hr$)$

Complete one course from:
SOC 327: Human Behavior Social Environment (3hrs)
PSYC 229 Social Psychology (3 hrs)

SPECIALTY AREAS
Choose ONE of the following:

## Anthropology Specialization

Complete 12 hours from 300/400 level ANTH.
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-
-
-

General Specialization
Complete 12 credits of 300/400 level SOC.
-
-
-
-
Gerontology Specialization**
GT 401: Biology, Health \& Personality Dimensions of Aging ( 3 hrs )
GT 225: Lifespan Development (3 hrs)
GT 496: Internship (1 hr)
PH 190: Introduction to Public Health (3 hrs)
Complete 3 credits from:
GT 403: Later Life and Spirituality (3 hrs)
GT 405: Institutional Care and Geriatric Assessment (3 hrs)
GT 407: Economics of Aging and Social Policies (3 hrs)
Complete 3 credits from:
HSA 405: Health Care Systems ( 3 hrs)
PH 401: Epidemiology ( 3 hrs)
SOC 337: Social Aspects Health/Care ( 3 hrs)
SOC 386: Death and Dying ( 3 hrs)
SOC 460: Aging and Society ( 3 hrs)
Free Electives ( 30 hours minimum)
*Satisfies both a general education and a major requirement
for a total of 3 hours in one area only.
** Gerontology specialization: Free Electives (27 hours)
39 Hours of $300 / 400$ level courses

## Gerontology Specialization**

GT 401: Biology, Health \& Personality Dimensions of Aging (3 hrs)
GT 225: Lifespan Development (3 hrs)
GT 496: Internship (1 hr)
ic Health (3 hrs)

GT 403: Later Life and Spirituality (3 hrs)
GT 405: Institutional Care and Geriatric Assessment (3 hrs)
GT 407: Economics of Aging and Social Policies (3 hrs)
Complete 3 credits from:
HSA 405: Health Care Systems (3 hrs)
PH 401: Epidemiology (3 hrs)
337: Social Aspects Health/Care (3 hrs)
SOC 386: Death and Dying (3 hrs)
SOC 460: Aging and Society (3 hrs)

Free Electives (30 hours minimum)
*Satisfies both a general education and a major requirement
for a total of 3 hours in one area only.
** Gerontology specialization: Free Electives (27 hours)
39 Hours of 300/400 level courses

## Bachelor of Science

## SOCIOLOGY

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
.
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- SOC 105: Intro to Sociology (min. grade of C- required)*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- SOC 450: Senior Seminar in Sociology

Overlay: Writing Across the Curriculum (4 courses)
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-
-

Major Requirements (43 hours)
SOC 105: Intro to Sociology (3 hrs)*
ANTH 207: Cultural Anthropology (3 hrs)
SOC 201: Professional Development Sociology ( 1 hr )
SOC 210: Deviance and Crime (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
SOC 343: Social Research Methods (4 hrs)
SOC 344: Introduction to Behavioral Statistics (4 hrs)
SOC 390: Principles of Sociological Theory (3 hrs)
SOC 438: Race and Ethnic Relations (3 hrs)


# Bachelor of Science in Actuarial Science 

Bachelor of Arts or<br>Bachelor of Science with a Major in Mathematics

Bachelor of Science<br>with a Major in Applied Mathematics

Bachelor of Science<br>with a Major in Predoctoral Mathematics

## Bachelor of Science in Statistics and Data Science

## Bachelor of Science with a Major in Math Education

Coursesinmathematicsandstatisticsaredesignedtodevelopquantitativereasoningskills,conceptual understanding, computational skills, and the ability to apply mathematical and statistical techniques toaddress real-world problems.Students may pursuefouroptions in Mathematics-a Bachelor of Arts with a major in mathematics, a Bachelor of Science with a major in mathematics (appropriateforstudentsseekingcertificationtoteachmathematicsattheseniorhigh,juniorhigh, andmiddleschoollevels), aBachelorofSciencewithamajorinappliedmathematics,andaBachelor ofSciencewithamajorin predoctoralmathematics.Inaddition,thedepartmentoffersaBachelorof Science in Actuarial Science and a Bachelor of Science degree in Statistics and Data Science. Alternatively,studentsmaypursueaminorinmathematicsortakemathematicsandstatisticscoursesto support work in other areas.

## Mathematics

Themathematicsmajorisdesignedforstudentsseekinganexposuretoadvancedmathematics aspartofabroad-basedliberalartscurriculum.Itis particularly suitableforstudentsinterestedin pursuing graduate study in mathematics or related disciplines.

## Applied Mathematics

Theappliedmathematicsmajoroffersafirmfoundationinappliedmathematicsbycombining arigorous program ofstudyinmathematicswithaconcentrationinoneormorefieldsofapplication -disciplines in which mathematical tools are used to solve real-world problems. Since this program providesforbothasoundmathematicaleducationandthedevelopmentofhighlymarketablepractical skills, graduates receiving this degreeare prepared foreitherimmediateemploymentorcontinued study at the graduate level.

## Predoctoral Mathematics

Thepredoctoralmajorpreparesmathematicallygiftedstudentsforgraduatestudyleadingtoa PhD in the mathematical sciences. The curriculum is highly advanced, with an emphasis on the developmentofindependentlearningskills.Studentsareexpectedtoparticipateinundergraduateresearchandtocompletethedepartment'sprofessionaldevelopmentprogram.Studentsin this programareassignedafacultymentorwhosupervises allaspects ofthestudent'sacademic development.Onlythemosthighlyqualifiedapplicantsareadmittedtothepredoctoral program.

## Statistics and Data Science

Thisprogramisgroundedinthemathematically rigoroustradition ofclassical, appliedstatis-ticswhileincorporatingcutting-edgetechniquesandtoolsintheemergingfield ofdatascience. Theprogramisdesignedtoequipstudentswiththequantitative,technical,andcommunication skillsnecessarytoteaseoutforward-looking,predictiveinsightfromdatatohelporganizations makebetterdecisions.Statisticscourses inthecurriculum areproject-driven, withanemphasis ontheanalysisofreal-worlddatausingstatisticalmethodsimplementedbypowerfulstatistical software.

## Mathematics Education

Successful completion of this degree qualifies students for teacher certification in Indiana and most other states.

## Mathematics Minor (20 hours)

Mathematics 221,222;atleastfour mathematics courses numbered 300 or above; Engineering 390(AppliedEngineeringMathematics) andPhysics305(MathematicalPhysics) maybeapplied towards this total.

## Statistics and Data Science Minor (18 hours)

Statistics 266, 267,300; a programming course (such as Computer Science 205 or 210) or a computationally intensive course (such as Quantitative Methods 160) approved by the Chair of the Department of Mathematics; 6 hours of $300 / 400$-level courses that are either applied statistics courses offered by the Mathematics Department or statistically intensive courses (such as Economics 300, Biology 415, Quantitative Methods 227)approved by the Chair of the Department of Mathematics.

## Calculus Sequence

The complete calculus sequence through multivariable calculus is
Mathematics 221, 222, 323. A one-semester survey of calculus is provided by Mathematics 134. Be advised that Mathematics 134 does notsatisfy the prerequisitefor Mathematics 222, and credit will not be given for both Mathematics 134 and 221.

Credit by Examination
TheDepartmentofMathematics adherestothe University policyon credit by examination. Students may not earn credit by examination inanymathematics courselistedas prerequisitefora course in which they already have credit.

## Bachelor of Science

## ACTUARIAL SCIENCE

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (42 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
utcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
.
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
.
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 101: Principles of Macroeconomics
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MATH 495: Senior Seminar: Math Modeling

Overlay: Writing Across the Curriculum (4 courses)
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-
-

Major Requirements (57 hours)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 324: Differential Equations (3 hrs)
MATH 330: Financial Mathematics (3 hrs)
MATH 341: Linear Algebra (3 hrs)
MATH 365: Probability (3 hrs)
MATH 431: Long Term Act Models I (3 hrs)
MATH 466: Mathematical Statistics (3 hrs)
Statistics courses
STAT 166: Intro to R for Data Science (1 hr)
STAT 266: Introduction to Statistics with R (3 hrs)
STAT 361: Linear Models (3 hrs)
STAT 362: Machine Learning (3 hrs)
Business courses
ACCT 210: Introduction to Financial Accounting (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
FIN 361: Fundamentals of Finance (3 hrs)
Choose two of the following three Finance courses:
FIN 427: Financial Derivatives (3 hrs)
FIN 462: Investments (3 hrs)
FIN 478: Risk Management (3 hrs)
Career development
EXED 090: Building a Professional Image (0 hrs)
Computer courses
CS 205: Programming for the Sciences OR CS 210: Fundamentals of Programming I (3 hrs) Choose one course from:
CS 215: Fundamentals of Programming II (3 hrs)
MATH 373: Numerical Methods (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
STAT 267: Experimental Design (3 hrs)
Free Electives (21 hours)
Recommended electives:
MATH 432: Long Term Act Models II (3 hrs)
STAT 493: Statistical Modeling (3 hrs)
FIN 362: Corporate Financial Policy (3 hrs)

39 Hours of 300/400 level courses

## Bachelor of Arts

## MATHEMATICS

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements
(48 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MATH 495: Senior Seminar: Math Modeling

Overlay: Writing Across the Curriculum (4 courses)
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-
-
-
Major Requirements (32 hours)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 341: Linear Algebra (3 hrs)
MATH 365: Probability (3 hrs)
MATH 420: Advanced Calculus ( 3 hrs )
MATH 445: Abstract Algebra ( 3 hrs )
Complete 6 hours from 300/400 level MATH:
Complete 6 hours from computer courses:
Courses must be approved by advisor.

Free Electives (40 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## MATHEMATICS

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements
(42 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language

Major Requirements (35 hours)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 341: Linear Algebra (3 hrs)
MATH 365: Probability (3 hrs)
MATH 420: Advanced Calculus (3 hrs)
MATH 466: Mathematical Statistics (3 hrs)
Complete one course from:
MATH 425: Complex Variables (3 hrs)
MATH 445: Abstract Algebra (3 hrs)
Complete 6 hours from 300/400 level MATH:
Complete 6 hours from computer courses:
Courses must be approved by advisor.

Free Electives (43 hours)

39 Hours of 300/400 level courses
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MATH 495: Senior Seminar: Math Modeling

Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

## Bachelor of Science

## APPLIED MATHEMATICS

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements (42 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MATH 495: Senior Seminar: Math Modeling

Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

## APPLIED MATHEMATICS

FIELDS OF APPLICATION/SPECIALIZATION

## Business Administration

ACCT 210: Introduction to Financial Accounting (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
FIN 361: Fundamentals of Finance ( 3 hrs )
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
6 credits of 300/400 level business courses:

Computer Science
CS 210: Fundamentals of Programming I (3 hrs)
CS 215: Fundamentals of Programming II (3 hrs)
CS 220: Logic Design \& Machine Organization (3 hrs)
CS 290: Object-Oriented Design (3 hrs)
9 credits of 300/400 level computer science courses.

## Economics

ECON 101: Principles of Macroeconomics (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
ECON 300: Regression Analysis (3 hrs)
ECON 345: Intermediate Microeconomics (3 hrs)
ECON 346: Intermediate Macroeconomics (3 hrs)
ECON 400: Econometrics (3 hrs)

Environmental Studies
BIOL 320: Evolution and Ecology (4 hrs)
CHEM 118: Principles of Chemistry I (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
ES 360: Science of Environmental Pollutants (3 hrs)
GEOL 130: Environmental Geology (3 hrs)
Complete one course from:
BIOL 108: General Zoology (3 hrs)
BIOL 109: General Botany (3 hrs)
Complete one course from:
BIOL 432: Ecology (3 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
Complete one course from:
BIOL 118: Modern Biology: Environmental Perspective (3 hrs)
ES 103: Fundamentals of Environmental Science (3 hrs)

Applied Math - Other Options
Other options include biology, chemistry, physics, or cognitive science. See Self-Service Student Planning for specific course requirements. A field of application in an area of special interest may also be chosen with the approval of the department.

## Bachelor of Science

## PREDOCTORAL MATHEMATICS

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements
(42 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MATH 495: Senior Seminar: Math Modeling

Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

Major Requirements (47 hours)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 324: Differential Equations (3 hrs)
MATH 341: Linear Algebra (3 hrs)
MATH 365: Probability (3 hrs)
MATH 420: Advanced Calculus (3 hrs)
MATH 445: Abstract Algebra (3 hrs)
Complete 6 hours of 300/400 level MATH.
Complete one course from:
MATH 373: Numerical Methods (3 hrs)
MATH 466: Mathematical Statistics (3 hrs)
Complete 9 hours of MATH.
Independent Study courses selected in consultation with faculty.
-
-
-
Complete 6 hours of computer courses.
Courses must be approved by advisor.

- CS 210: Fundamentals of Programming I (3 hrs)

Free Electives (31 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## STATISTICS AND DATA SCIENCE

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements
(42 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
.

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MATH 495: Senior Seminar: Math Modeling

Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

## Bachelor of Science

## MATHEMATICS EDUCATION

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements

 (42 hours)Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy -
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
.
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MATH 495: Senior Seminar: Math Modeling

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (74 hours)
Professional Education Requirements
PSYC 226: Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar (1 hr)
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - JH/Middle School (3 hrs) EDUC 456: Methods of Teaching Math SH/JH/MS (2 hrs)

Mathematics Requirements
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 341: Linear Algebra (3 hrs)
MATH 355: Foundations of Geometry (3 hrs)
MATH 365: Probability (3 hrs)
MATH 370: Discrete and Combinatorial Math (3 hrs)
MATH 420: Advanced Calculus (3 hrs)
MATH 466: Mathematical Statistics (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
MATH 425: Complex Variables (3 hrs) OR
MATH 445: Abstract Algebra (3 hrs)
CS 205: Programming for the Sciences (3 hrs) OR
CS 210: Fundamentals of Programming I (3 hrs

Free Electives (4 hours)

39 Hours of 300/400 level courses

# Bachelor of Music in Music Education 

Bachelor of Music<br>with a Major in Performance

## Bachelor of Music in Music Therapy

Bachelor of Science with a Major in Music emphasis in Music Management available

Department of Music curricula are designed to prepare students for professional careers in music, to give all students opportunities to understand themselves and the world around them through participation and study of music, and to contribute to the artistic and cultural life of the University and broader community.

The department offers the following degrees:Bachelor of Music with majors in performance, music education, and music therapy; Bachelor of Science with a major in music; and Bachelor of Science with a major in music and an emphasis in music management. Auditions are required for entry into all degree programs.

The department has been a member of the National Association of Schools of Music since 1948. Entrance and graduation requirements are in accordance with published regulations of NASM.

## Requirements

Participationintheappropriatemajorensembleisrequiredeachsemesterthestudentisenrolled (with the exception of students enrolled at Harlaxton or in student teaching). Students may be assignedtoparticipateinadditionalensemblesdependingontheneedsofthedepartmentasdetermined by the faculty. Part-timefifth-year seniors who are nolonger receiving a music scholarship are exempt from this requirement.

Studentsenrolledinappliedmusicareexpectedtoappearfrequentlyinworkshoprecitals.The actual number of performances is determined through consultation with the student's applied teacher.

Allstudentsenrolledinmusicensemblesareresponsibleforobtainingappropriateformalattire forconcerts, particularly University Choir,University Bands, and University Symphony Orchestra; see specific course syllabi. Check the Music Student Handbook or contact the instructor for more information.

Themusicfacultyconsidersattendanceatrecitalstobeofgreatimportanceinthedevelopment ofmusicianshipandrequiresrecitalattendance.StudentsmustenrollinRecital Attendance(Music 100,101,200etc.)eachsemesterinresidence.Specificrecitalattendancerequirementsandguidelines are described in the Music Student Handbook.

All non-keyboardmusic majors mustenroll in class piano (or, if placed, in applied piano) as the minorinstrumentrequirementuntiltheappropriatepianoproficiencyrequirementsarecompleted foreachrespectivedegree.Oncepianoproficienciesaresuccessfullycompleted,remainingminor credit hour requirements may be fulfilled by study of any instrument or voice. Piano class enrollment should begin at the same time as Music 141 (Diatonic Harmony).

Itistheresponsibilityofthestudenttobeawareofdepartmentalregulationsand proceduresas identified in this catalog and the Music Student Handbook.

## Music Education

Successful completion of this degree qualifies students for teacher certification in Indiana and most other states. The program includes vocal, instrumental, or all area emphases (vocal and instrumental) and prepares students for certification at the P -12 levels for each chosen dis-
cipline.

## Performance

This degree is designedforstudents who wish to pursue a career in performance or a related field.Itisthemostmusic-intensivedegreeoffered.Studentsareadmittedtotheprogramconditionallypendingcompletion ofcomprehensivejuriesattheendofthefreshmanandsophomore years. Acceptance is highly selective to promote student success.

## Music Therapy

This degree prepares musicians for careers in music therapy. The curriculum emphasizes the study of music and music therapy, as well as the behavioral sciences. This program is fully approvedbytheAmericanMusicTherapyAssociation,makingstudentseligibletotaketheboard certification exam after successful completion of course work and a six-month music therapy internship.

## Music Therapy Equivalency Program

This program is for individuals who have already completed a degree in a field related to musictherapy (musiceducation, music performance, etc.). Although no degree is awarded, the completion of this program and a six-month music therapy internship qualifies the student to take the board certification exam.

## Earn Two Degrees: Music Therapy and Music Education

This program is for students interested in combining their skills and talents as music therapists and music educators. A particular combination of courses ensures the requirements for both degrees are met. All course work and student teaching are completed in five years,followed byasix-monthmusictherapyinternship.Thedegrees leadtowardbecomingacredentialedmusictherapistandearningan Indiana teacher certificate in vocal or instrumental music (K-12).

## Music

This major integrates the study of music within a liberal arts curriculum. Itprovides anappropriatebackgroundforstudentswishingto pursueadvanceddegreesinmusictheory,musicology,composition, and music librarianship. The music content of the degree is flexible, making it ideal for combining with degrees in non-music fields.

## Emphasis in Music Management

This major combines music and business studies for the student interested in working in the music industry (retail, arts management, music technology). The music and business courses are supplementedwithelectivesineachareatoallowforthedevelopmentof individual interests.

## Music Studies Minor (20 hours)

This curriculum allows the major in another area with a strong interest in music to obtain a minor in music studies.

## Music 140 or 141, 142, 355, 356

Applied music - 4 hours: One hour per semester for four semesters
Major ensemble-4hours:One hour per semester for four semesters
Suzuki Violin Pedagogy Certificate (12 hours)
The Suzuki pedagogy certificate can be earned through a 12-hour programthatofferscomprehensiveteachertraininginSuzukiTalent Education" to violinists pursuing any degree in music. The program includessixsemestersofclassroomstudy,observationofexperienced teachers, and practicum teaching in the University of Evansville Suzuki Violin Program. Upon completion, participants receive a certificate that may be registered with the Suzuki Association of the Americas.
Music 260, 261, 360, 361, 460, 461

## Jazz Studies Certificate (12 hours)

The jazz studies certificate is a 12 -hour program that includes the performance of jazz as well as jazz music analysis, composition and arrangementofjazzmusic, andlearningtheartofimprovisation. The jazzstudies certificate is open to any UEstudent whohas completed the prerequisite courses and has also received permission from the instructor(s).
Music 158, 243, 245, 341, six semesters of Music 113-413 Jazz Ensemble I (for a total of 3 hours)

## Performing Ensembles

The Department of Music sponsors performing ensembles open to music and non-music majors alike. These ensembles perform regularly in concert on and off campus. All UE students are encouraged to participate.Someensembles requireanauditionatthebeginning ofthesemester.InterestedstudentsshouldcontacttheDepartmentof Music for additional information.
Vocal ensembles include University Choir, Mixed Chorus, Women's Chorus, and Kantorei. Opera MainStage provides theatrical performing opportunities for music and non-music majors.
Instrumental ensembles include Wind Ensemble, University Band, Aces Brass, and University Symphony Orchestra. Jazz ensembles include two full-size bands and small combos.
Chambermusicopportunitiesincludebrasschoir,alargestringensemble, woodwind quintet, string quartets, and piano trios. Like-instrument groups include percussion, guitar, flute, clarinet, trumpet, low brass, and other ensembles.
Additional information is included in the "Course Offerings and Descriptions" section of this catalog.

## Bachelor of Music

## MUSIC EDUCATION - INSTRUMENTAL

2019-2020 | 130 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MUS 498: Seminar in World Music

Overlay: Writing Across the Curriculum (4 courses)
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-
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-
Major Requirements ( 89 hours)
Education Core
Minimum GPA of 3.0 required in the following courses for admission to student teaching
EDUC 150: Foundations/Diversity in American Education (3 hrs)
EDUC 363: Princ \& Strategies Teaching Secondary Schools (3 hrs) MUS 370: Elem. Methods/Materials in Gen. Music (3 hrs) MUS 373: Methods/Materials in Instrumental Music (3 hrs) EDUC 435: Supervised Teaching Seminar (1 hr)
MUS 260: Suzuki Pedagogy (2 hrs) OR

MUS 476: Marching Band Techniques (2 hrs)
Music Requirements
MUS 140: Diatonic Harmony ( 5 hrs ) OR
MUS 141: Diatonic Harmony (3 hrs)
MUS 142: Chromatic Harmony (3 hrs)
MUS 171: Foundations of Music Education (3 hrs)
MUS 241: Introduction to Form (3 hrs)
MUS 242: Post-Tonal Theory (3 hrs)
MUS 262: Woodwind Tech \& Pedagogy I (1 hr)
MUS 263: Brass Tech \& Pedagogy I (1 hr)
MUS 264: Percussion Techniques ( 1 hr )
MUS 265: String Tech \& Pedagogy I (1 hr)
MUS 271: Pract School Music Experiences (2 hrs)
MUS 272: Woodwind Tech \& Pedagogy II (1 hr)
MUS 273: Brass Tech \& Pedagogy II (1 hr)
MUS 275: String Tech \& Pedagogy II (1 hr)
MUS 346: Orchestration (2 hrs)
MUS 350: Conducting I (3 hrs)
MUS 351: Conducting II (2 hrs)
MUS 355: History of Music I (3 hrs)
MUS 356: History of Music II (3 hrs)
MUS 357: Topics in Music History and Culture (3 hrs)
Complete 9 hours from:
MUS 478: Student Teaching in Music (4.5-6 hrs)
MUS 479: Student Teaching in Music (6-12 hrs)
Applied Music
Complete 14 hours of your major instrument.
100, 200, 300, and 400-level
Complete 4 hours of Piano.
Allowable courses include APM 115, 215, 315, 415; MUS 104, 105,
204, 205
Ensembles
Complete 7 hours of ensembles.
Major ensemble participation is a requirement of each semester of residency. One hour must be at 400 level.
$100,200,300$, and 400-level
Recital

- Students must complete MUS 100-400/101-401 Recital Attendance for 0 hours
- Students must complete a Senior Recital (.5 hrs)


## Complete Piano Proficiency

MUS-PROF 1 (0 hrs)
MUS-PROF 2 ( 0 hrs )

39 Hours of 300/400 level courses

## Bachelor of Music

## MUSIC EDUCATION - VOCAL

2019-2020 | 125 Hours Required
Enduring Foundations General Education Requirements (41 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MUS 498: Seminar in World Music

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (84 hours)
Education Core
Minimum GPA of 3.0 required in the following courses for admission to student teaching.
EDUC 150: Foundations/Diversity in American Education (3 hrs)
EDUC 363: Princ \& Strategies Teaching Secondary Schools (3 hrs)
MUS 370: Elem. Methods/Materials in Gen. Music (3 hrs)
MUS 372: Methods/Materials in Choral Music (3 hrs)
EDUC 435: Supervised Teaching Seminar (1 hr)

## Bachelor of Music

## MUSIC EDUCATION - VOCAL AND INSTRUMENTAL

2019-2020 | 142 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition .

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MUS 498: Seminar in World Music

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (101.5 hours)
Education Core
Minimum GPA of 3.0 required in the following courses for admission to student teaching
EDUC 150: Foundations/Diversity in American Education (3 hrs)
EDUC 363: Princ \& Strategies Teaching Secondary Schools (3 hrs)
MUS 370: Elem. Methods/Materials in Gen. Music (3 hrs)
MUS 372: Methods/Materials in Choral Music (3 hrs)
MUS 373: Methods/Materials in Instrumental Music (3 hrs)
EDUC 435: Supervised Teaching Seminar (1 hr)
MUS 260: Suzuki Pedagogy (2 hrs) OR

MUS 476: Marching Band Techniques (2 hrs)
Music Requirements
MUS 140: Diatonic Harmony ( 5 hrs ) OR
MUS 141: Diatonic Harmony (3 hrs)
MUS 102: Diction I (1 hr)
MUS 103: Diction II (1 hr)
MUS 142: Chromatic Harmony (3 hrs)
MUS 171: Foundations of Music Education (3 hrs)
MUS 236: Guitar \& Voice Tech I (1 hr)
MUS 241: Introduction to Form (3 hrs)
MUS 242: Post-Tonal Theory (3 hrs)
MUS 262: Woodwind Tech \& Pedagogy I ( 1 hr )
MUS 263: Brass Tech \& Pedagogy I (1 hr)
MUS 264: Percussion Techniques (1 hr)
MUS 265: String Tech \& Pedagogy I (1 hr)
MUS 271: Pract School Music Experiences (2 hrs)
MUS 272: Woodwind Tech \& Pedagogy II (1 hr)
MUS 273: Brass Tech \& Pedagogy II (1 hr)
MUS 275: String Tech \& Pedagogy II (1 hr)
MUS 346: Orchestration (2 hrs)
MUS 350: Conducting I (3 hrs)
MUS 351: Conducting II (2 hrs)
MUS 355: History of Music I (3 hrs)
MUS 356: History of Music II (3 hrs)
MUS 357: Topics in Music History and Culture (3 hrs)
MUS 474: Pedagogy of Applied Major (2 hrs)
Complete 9 hours from:
MUS 478: Student Teaching in Music ( $4.5-6$ hrs)
MUS 479: Student Teaching in Music (6-12 hrs)
Applied Music
Complete 14 hours of your major instrument.
$100,200,300$, and 400 -level
Complete 4 hours of Piano:
Allowable courses include APM 115, 215, 315, 415; MUS 104, 105, 204, 205
Complete 2 hours of Voice:
Allowable courses include APM 123, 223, 323, 423

Ensembles
Complete 9 hours of ensembles
Majorensembleparticipationisarequirementofeachsemesterofresidency.
3 hours must be at 400 level.
$100,200,300$, and 400 -level
Recital

- Students must complete MUS 100-400/101-401 Recital Attendance for 0 hours
- Students must complete a Senior Recital (. 5 hrs )

Complete Piano Proficiency
MUS-PROF 1 (0 hrs)
MUS-PROF 2 ( 0 hrs )
39 Hours of 300/400 level courses

## Bachelor of Music

## PERFORMANCE

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
utcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MUS 498: Seminar in World Music

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (73 hours) MUS 140: Diatonic Harmony (5 hrs) OR
MUS 141: Diatonic Harmony (3 hrs)
MUS 142: Chromatic Harmony (3 hrs)
MUS 241: Introduction to Form (3 hrs)
MUS 242: Post-Tonal Theory (3 hrs)
MUS 340: Counterpoint (3 hrs)
MUS 343: Form and Analysis (3 hrs)
MUS 350: Conducting I (3 hrs)
MUS 355: History of Music I (3 hrs)
MUS 356: History of Music II (3 hrs)
MUS 357: Topics in Music History \& Culture (2 courses, 6 hrs max)
MUS 451: Lit of the Applied Major (2 hrs)
MUS 474: Pedagogy of Applied Major (2 hrs)
Applied Music - Complete 24 hours of your major instrument
Note: Voice majors are required to complete 22 credits of APM as well as MUS 102 and MUS 103.

Complete 4 hours of a minor instrument.
Allowable courses include APM 115, 215, 315, 415; MUS 104, 105, 204, 205

Complete 8 hours of ensembles.
Major ensemble participation is a requirement of each semester of residency.

Complete Piano Proficiency I
MUS-PROF 1 (0 hrs)
(Note: Voice majors must complete Piano Proficiency II)
MUS-PROF 2 ( 0 hrs )
Recital
Students must complete MUS 100-400/101-401 Recital Attendance for 0 hrs .

Students must complete a Junior Recital (half) and Senior Recital (full).

Free Electives (6 hours)

39 Hours of 300/400 level courses

## Bachelor of Music

## MUSIC THERAPY

2019-2020 | 123 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
utcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- SOC 105: Introduction to Sociology (3 hrs)
- PSYC 121: Introduction to Psychology (3 hrs

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MUS 498: Seminar in World Music

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (81 hours)
MUS 140: Diatonic Harmony ( 5 hrs ) OR
MUS 141: Diatonic Harmony (3 hrs)
MUS 142: Chromatic Harmony (3 hrs)
MUS 241: Introduction to Form (3 hrs)
MUS 242: Post-Tonal Theory (3 hrs)
MUS 350: Conducting I (3 hrs)
MUS 355: History of Music I (3 hrs)
MUS 356: History of Music II (3 hrs)
PSYC 225: Lifespan Development (3 hrs)

PSYC 259: Abnormal Psychology (3 hrs)
PSYC 333: Psychopathology in Children and Adolescents (3 hrs)
Complete the following with grade of C - or better:
MUS 184: Orientation to Music Therapy (3 hrs)
MUS 236: Guitar \& Voice Techniques I (1 hr)
MUS 237: Guitar \& Voice Techniques II (1 hr)
MUS 286: Approaches \& Materials in Music Therapy (3 hrs)
MUS 336: Introduction to Improv Methods (2 hrs)
MUS 384: Receptive/Comp Methods in Music Therapy (3 hrs)
MUS 386: Psychology of Music (3 hrs)
MUS 486: Music Therapy Research (4 hrs)
Complete the following with grade of B - or better:
MUS 188: Music Therapy Practicum (1 hr)
MUS 287: Music Therapy Practicum (1 hr)
MUS 288: Music Therapy Practicum (1 hr)
MUS 387: Music Therapy Practicum ( 1 hr )
MUS 388: Music Therapy Practicum (1 hr)
MUS 487: Music Therapy Practicum (1 hr)
Applied Music - Complete 13 hours of your major instrument. Note: Voice majors must complete 12 hours of APM as well as MUS 102 and MUS 103.

Complete 4 hours of a minor instrument.
Allowable courses include APM 115, 215, 315, 415; MUS 104, 105, 204, 205

Complete 8 hours of ensembles.
Ensembleparticipationisarequirementofeachsemesterofresidency.
Complete Piano and Guitar Proficiency
MUS-PROF I (0 hrs)
MUS-PROF II (0 hrs)
MUS-GTR (0 hrs)
Recital
Students must complete MUS 100-400/101-401 Recital Attendance for 0 hrs
Students must complete a Senior Recital (half)
Clinical Training
Students must complete a six-month music therapy internship.

Free Electives (1 hour)
39 Hours of 300/400 level courses

## Bachelor of Science

## MUSIC MANAGEMENT

2019-2020 | 123 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
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Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MUS 498: Seminar in World Music

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements ( 82 hours)
MUS 140: Diatonic Harmony ( 5 hrs ) OR
MUS 141: Diatonic Harmony (3 hrs)
MUS 142: Chromatic Harmony (3 hrs)
MUS 355: History of Music I (3 hrs)
MUS 356: History of Music II (3 hrs)
MUS 391: Music Business Opportunities (2 hrs)
MUS 392: Intro to Music Business \& Technology (3 hrs)
ECON 101: Principles of Macroeconomics (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
QM 227: Introduction to Statistics (3 hrs)
ACCT 210: Introduction to Financial Accounting (3 hrs)
ACCT 211: Introduction to Managerial Accounting (3 hrs)
LAW 201: Legal Environment of Business (3 hrs)
FIN 361: Fundamentals of Finance ( 3 hrs )
MGT 311: Management Information Systems (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
MUS 390: Music Management Internship (5 hrs)

Complete 3 hours from 300/400 level MUS.
Applied Music
Complete 14 hours of your major instrument. Voice majors must complete 12 hours of APM as well as MUS 102 \& 103.

Complete 2 hours of a minor instrument.
Allowable courses include APM 115, 215, 315, 415; MUS 104, 105, 204

Complete 8 hours of ensembles.
Ensembleparticipationisarequirementofeachsemesterofresidency.
Piano Proficiency
MUS-PROF I (0 hrs)
Recital
Students must complete MUS 100-400/101-401 Recital Attendance for 0 hrs. Students must complete a Senior Recital (half)

39 Hours of 300/400 level courses

## Bachelor of Science

## MUSIC

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing

- MUS 498: Seminar in World Music

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (40 hours) MUS 140: Diatonic Harmony ( 5 hrs ) OR
MUS 141: Diatonic Harmony ( 3 hrs )
MUS 142: Chromatic Harmony (3 hrs)
MUS 355: History of Music I (3 hrs)
MUS 356: History of Music II (3 hrs)

Complete at least 7 hours from the following courses:
MUS 241: Introduction to Form (3 hrs)
MUS 242: Post-Tonal Theory (3 hrs)
MUS 340: Counterpoint (3 hrs)
MUS 343: Form and Analysis (3 hrs)
MUS 260: Suzuki Pedagogy I (2 hrs)
MUS 261: Suzuki Pedagogy II (2 hrs)
MUS 346: Orchestration (2 hrs)
MUS 350: Conducting I (3 hrs)
MUS 357: Topics Music History and Culture (2 topics, 6 hrs max)
MUS 451: Lit of the Applied Major (2 hrs)
MUS 474: Pedagogy of Applied Major (2 hrs)
Applied Music
Complete 8 hours of your major instrument
Complete 2 hours of your minor instrument.
Allowable courses include APM 115, 215, 315, 415; MUS 104, 105, 204, 205

Music Electives - 3-16 additional hours (max of 54 hours in music courses)
Choose any additional music courses from the Music Academic Requirements above, MUS 102 \& 103 (required for voice majors), 6 additional hours from applied major, 2 hours from MUS 204, 205, 262, 263, 264, 265, 266, or applied minor; MUS 155, 156, 158, 159, 171, 184, 243, 357 (2 topics, 6 hrs max), 392, and 476.

Complete Piano Proficiency
MUS-PROF I ( 0 hrs )
Complete 8 hours of ensembles.

Free Electives (39 hours)*
*A minimum of 25 hours of non-music courses

39 Hours of 300/400 level courses

# Philosophy and Religion 

# Bachelor of Science with a Major in Cognitive Science 

Bachelor of Arts or Bachelor of Science with a Major in Ethics and Social Change

Bachelor of Arts with a Major in Philosophy

Bachelor of Arts with a Major in Religion

The Department ofPhilosophy and Religion offers a Bachelor ofScience degree with a major in cognitive science, Bachelor of Arts and Bachelor of Science degrees with a major in ethics and socialchange,andaBachelorofArtsin philosophyorreligion. Inaddition,thedepartmentoffers a minor in cognitive science, ethics, ethics and social change, philosophy, and religion.

## Cognitive Science

Director: Jones
Cognitive science is the general study of intelligence.It seeks to understand how thought processesfunction, howtheymightbeinstantiatedinmachinery, and howourcognitive initiatives relate to the brain. Researchers in cognitive science work in a variety of areas ranging from artificialintelligenceandneurophysiologytocognitivepsychologyandthephilosophyofmind. ThecognitivescienceprogramattheUniversity ofEvansvillewasdesignedto preparestudents for a range of possible vocations, many of which will require further study in graduate school. Indeed, most of our majors continue their studies by pursuing this path.

Inkeepingwiththeinterdisciplinaryspiritofcognitivescience,majorsareencouragedtoadd depthandbreadthtotheirexperiencebythewaytheyusethe40to45 electivecreditspermitted bytheprogram.Forinstance,tosupplementtheirdegree,studentsoftencompleteasecond(or third) major, pick up additional minors, or design their own path through a variety of relevant courses.Additionalmajorsthatfitwellwithcognitivescience includeappliedmathematics,biology,computerscience,economics,neuroscience,philosophy,andpsychology,dependingonthe particular methods requirement a student may select (see below).

Allmajorsincognitivescienceautomaticallymeettherequirementsforaminorinphilosophy, though they must declare the philosophy minor along with the cognitive science major.

## Ethics and Social Change

Director: Kretz
The ethics and social change major combines academic study with field experience in order to equip students to address complex problems in local communities and the world. The program takesamultidisciplinaryapproachtoallowstudentstocomplementanethicscorewithconcentrations in two other areas, thereby facilitating a possible double major with one of the two areas of concentration.Studentsmaychoosefromavariety ofconcentration pairingstocreateaprogram tailoredtoindividualvalues andinterests. Fieldworkisbuiltdirectly intothecurriculum providing ample opportunities to get involved and make a real difference in the world.

## Philosophy

Philosophy fosters an appreciation for the role of critical thinking in all aspects of life. It is ahumanities-baseddisciplinethatmakesstudentsawareofperennialissuesconfrontinghuman beings, particularlyrespectingtheirplacewithinsociety,theirclaimtoknowledge,andtheircommitment to values. As such, the philosophy major provides students with the tools they need to succeedinavariety ofgraduate programs,including philosophy, religion, political science,law, and business.Thephilosophyminorsupplementsothermajorsbyaffordingstudentstheopportunity to build their own program.

## Religion

The Department of Philosophy and Religion offers a major in religion that allows students theopportunitytoworkcloselywithanadvisortoselectcoursesthatmeettheirindividualgoals and interests. By doing so, the religion major provides outstanding preparation for seminary or graduatestudyinreligion, anexcellentfoundationforpre-laworpre-medicine,acomprehensive education for work in nonprofit areas or various aspects of ministry, and a well-rounded liberal artscurriculumforthosewhofindreligiousquestionsandissuescompelling.Studentsinterested in ministry may want to considerthe Pre-Ministryadvisng trackin conjunction with the Religion major.

## Cognitive Science Minor (18 hours)

Cognitive Science 111, 498; Neuroscience 125; and any three of the following: Neuroscience 357; Philosophy 345, 447, 451; Psychology 355,366 . Substitutions for the three elective courses are permitted with pertinent courses from other areas with the approval of the directorofcognitivescience.Thesecanincludecoursesfromanthro-pology,biology,cognitivescience,computerscience,economics,education, engineering,mathematics, orothercoursesfrom philosophy or psychology.

## Ethics Minor (18 hours)

Ethics 121 or Philosophy 121; Religion 201 (both of these entry-level courses must be completed with a grade of B - or above); Ethics 499; Three courses from: Communication 485; Criminal Justice 440; Exercise and Sport Science 310; Health Services Administration 406; History 438; Philosophy 241, 316, 317, 321, 450, 301 or 459 (dependent on topic);Religion 305, 350,445. Other courses may apply with the approval of the director of the program.

## Ethics and Social Change Minor (18 hours)

Ethics 121, 200, 345, 375, 475, and 499

## New Testament Greek Minor (19 hours)

ThedepartmentoffersaminorinthelanguageoftheNewTestament todevelopskillsinusingancient Greektostudyandinterpretbiblical texts.
Greek 211, 212; one from Greek 351, 371, 411, or 421; Religion 320, 330;Religion435, normally taken in conjunction with the upperlevel biblical studies course above

Philosophy Minor (18 hours)
Eighteen hours in philosophy, which may includeCognitive Science 498
Religion Minor (18 hours)
Thereligionminorconsistsofanyeighteenhoursinreligion.Students may take ETH 200 (Social Justice Movements), ANTH 453 (Anthropology of Religion), and/or GRK 371 (New Testament Greek Exegesis) toward their religion minor requirements
New Testament Greek Minor (19 hours)
ThedepartmentoffersaminorinthelanguageoftheNewTestament todevelopskillsinusingancientGreektostudyandinterpretbiblical texts.
Greek 211, 212; two from Greek 351, 371, 411, or 421; Religion 320, 330;Religion435, normallytaken in conjunction with the upperlevel biblical studies course above.

## Bachelor of Science

## COGNITIVE SCIENCE

## 2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)
Outcome 1: (3 hrs) Critical Reading \& Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

- PHIL 221: Modern European Philosophy (3 hrs)

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity -

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language -
-
Outcome 7: (3 hrs) Quantitative Literacy

- PHIL 231: Symbolic Logic

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- NEUR 125: Intro to Behavioral Science
- 

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Psychology
PSYC 245: Statistics for Psychologists (4 hrs)
PSYC 246: Research Methods in Psychology (4 hrs)

Free Electives (41 hours)

39 Hours of 300/400 level courses

## Bachelor of Arts

## ETHICS AND SOCIAL CHANGE

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (47 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
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-
-
-
Outcome 7:Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- SOC 105: Introduction to Sociology (3 hrs)*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- ETH 499: Ethics and Social Change (3 hrs)

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (54 hours)
ETH 121: Introduction to Ethics (3 hrs)
SOC 105: Introduction to Sociology (3 hrs)*
ETH 200: Social Justice Movements (3 hrs)
ETH 345: Complex Systems and Social Change (3 hrs)
ETH 375: Social Change Field Experience (3 hrs)
ETH 475: Social Change Field Experience (3 hrs)
Concentration Requirement
Students mustcompletetwo concentrations of 18 hours eachin consultation with the Director of the Ethics Program or an ESC advisor (36 hours total). See Student Planning for Specific courses that may apply toward the concentration. Concentration options include:

- Business Administration
- Cognitive Science
- Communication
- Criminal Justice
- Environmental Studies
- Gender and Women's Studies
- Legal Studies
- Philosophy
- Political Science
- Psychology
- Race and Ethnicity Studies
- Religion
- Sociology or Social Work (not both)

Free Electives (19 hours)

39 Hours of 300/400 level courses

NOTES

- *Satisfies both a general education and a major requirement for a total of 3 hours in one area only.
- All majors (even double majors or double degrees) must take ETH 499.


## Bachelor of Science

## ETHICS AND SOCIAL CHANGE

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- SOC 105: Introduction to Sociology (3 hrs)*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- ETH 499: Ethics and Social Change (3 hrs)

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (54 hours)
ETH 121: Introduction to Ethics (3 hrs)
SOC 105: Introduction to Sociology (3 hrs)*
ETH 200: Social Justice Movements (3 hrs)
ETH 345: Complex Systems and Social Change (3 hrs)
ETH 375: Social Change Field Experience (3 hrs)
ETH 475: Social Change Field Experience (3 hrs)
Concentration Requirement
Studentsmustcompletetwo concentrations of 18 hours eachinconsultation with the Director of the Ethics Program or an ESC advisor (36 hours total). See Student Planning for Specific courses that may apply toward the concentration. Concentration options include:

- Business Administration
- Cognitive Science
- Communication
- Criminal Justice
- Environmental Studies
- Gender and Women's Studies
- Legal Studies
- Philosophy
- Political Science
- Psychology
- Race and Ethnicity Studies
- Religion
- Sociology or Social Work (not both)

Free Electives (25 hours)

39 Hours of 300/400 level courses

NOTES

- *Satisfies both a general education and a major requirement for a total of 3 hours in one area only.
- All majors (even double majors or double degrees) must take ETH 499.


## Bachelor of Arts

## PHILOSOPHY

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements
(47 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

Major Requirements (31 hours)
PHIL 121: Introductory Ethics (3 hrs)
PHIL 211: Ancient Greek Philosophy (3 hrs)
PHIL 221: Modern European Philosophy (3 hrs)
PHIL 231: Symbolic Logic (3 hrs)
PHIL 412: Contemporary Philosophy (3 hrs)
PHIL 499: Senior Seminar in Philosophy ( 1 hr )
Complete 15 hours from 300/400 philosophy:
Courses may include COGS 345, 498; PHIL 491 may apply only once
toward the major; PHIL 492 may not count as one of these courses.

Free Electives (46 hours)

39 Hours of 300/400 level courses

NOTES

- All majors (even double majors or double degrees) must take PHIL 499


## Bachelor of Arts

## RELIGION

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements
(41 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

Major Requirements (30 hours)
Complete30hours fromReligion. Coursesshouldbeselectedinclose consultation with advisor. At least 18 hours must be 300/400 level. Students may take ANTH 453, ETH 200, PHIL 240, and/or GRK 371 toward these requirements.

Complete 18 hours from 300/400 REL
-
-
-
-
-
-
Complete 12 hours from any level REL
-
-
-
Free Electives (43 hours)

39 Hours of 300/400 level courses

## Physics

Faculty: Stamm (Chair), Braun, Harmon

## Bachelor of Arts or Bachelor of Science with a Major in Physics

Bachelor of Arts with a Major in Physics Education

A major in physics provides a foundation in the most fundamental of the sciences. This can pre-pareoneforgraduatestudiesinphysicsorengineering;forawiderangeofscience-relatedcareers inmedicine, electronics,energy,orcomputerscience;orforacareerinteaching.Physics courses rangefromanintroduction ofbasicprinciplestoin-depth studies ofthefundamental properties and behavior of energy and matter.

The Department of Physics offers the Bachelor of Science and Bachelor of Arts degrees. Students who plan a career in secondary education, or who wish to include physics as part of a broader liberal arts program, should consider the Bachelor of Arts degree. The Bachelor of Sciencedegreeis recommendedforstudentsconsidering a careerasaphysicist,engineer,orother professional scientist.

It is possible, with advanced planning, to spend a semester in England and still complete all degreerequirementswithinfouryearsbytakinggeneraleducationcoursesatHarlaxtonCollege.

## Bachelor of Arts with a Major in Physics Education

Successful completion of this degree qualifies students for teacher certification in Indiana and most other states.
Physics Minor (21 hours)
Physics 210, 211, 213, 214, 305; one from Electrical Engineering 320, Physics 312, 401; one from Physics 416,471 ; additional hours must be chosen from 300- or 400 -level physics courses (not including Physics 499)
(Physics350willnotbeallowedasanelectiveforelectricalengineeringmajorswhoareminoring in physics.)
Aco-opprogramleadingtoaBachelorofSciencedegreewithamajorinphysics is available.Under this program, a student usually works in industry or at a governmentlaboratory during the summersand onesemester.CallorwritethechairoftheDepartmentofPhysicsformoreinformation and an application.

## Bachelor of Arts

## PHYSICS

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements
(48 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (40 hours)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
PHYS 210: Calculus Physics I (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)
PHYS 213: Intro to Modern Physics (3 hrs)
PHYS 214: Modern Physics Lab ( 1 hr )
PHYS 305: Mathematical Physics (3 hrs)
PHYS 312: Classical Mechanics (4 hrs)
PHYS 401: Advanced Electromagnetics (4 hrs)
PHYS 416: Statistical Thermodynamics (3 hrs)
PHYS 471: Quantum Mechanics (3 hrs)
Physics Electives
Complete3hourstototal32hoursinPhysics.Recommendedcourses are PHYS 195, 220, 221, 350, 421, and 427.
Free Electives (32 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## PHYSICS

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements (42 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Uutcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- 

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-
Major Requirements (52 hours)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
PHYS 210: Calculus Physics I (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)
PHYS 213: Intro to Modern Physics (3 hrs)
PHYS 214: Modern Physics Lab (1 hr)
PHYS 305: Mathematical Physics (3 hrs)
PHYS 312: Classical Mechanics (4 hrs)
PHYS 401: Advanced Electromagnetics (4 hrs)
PHYS 414: Advanced Laboratory (3 hrs)
PHYS 416: Statistical Thermodynamics (3 hrs)
PHYS 471: Quantum Mechanics (3 hrs)
PHYS 494: Physics Seminar (1 hrs)
PHYS 499: Physics Research/Independent Study (1-4 hrs)
Complete one course from:
PHYS 220: Simulations for PHYS 210 (1 hr)
(taken concurrently with PHYS 210: Calculus Physics I)
PHYS 221: Simulations for PHYS 211 (1 hr)
(taken concurrently with PHYS $211:$ Calculus Physics II)
Complete one course from:
PHYS 340: Computational Physics (3 hrs)
PHYS 350: Electronics (4 hrs)
Physics Electives
Complete 6 credits to total 44 credits in Physics. Recommended
courses are PHYS 190, $320,322,330,331,405,421,422,423,427$.
-
Pree Electives (26 Hours)

39 Hours of 300/400 level courses

NOTES

- Undergraduate Research - Undergraduate research is required for the $B S$ degree in physics. The research may be completed on campus, under the direction of one of the University physics faculty members, or it may be completed off campus (typically, through the National Science Foundation's summer Research Experiences for Undergraduates program).


## Bachelor of Arts

## PHYSICS - EDUCATION

2019-2020 | 134 Hours Required

## Enduring Foundations General Education Requirements

 (48 hours)Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
Complete courses or proficiency through the 212 level.
-
-
-
-
Outcome 7: (4 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Intro to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- EDUC 490: Schools in a Changing Society (3 hrs)

Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

Major Requirements (86 hours)
PSYC 226: Child \& Adolescent Psychology (3 hrs)
EDUC 150: Foundations/Diversity in American Educ. (3 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 363: Principles \& Strategies, Secondary Schools (3 hrs)
EDUC 385: Multicultural Understanding ( 3 hrs )
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 435: Supervised Teaching Seminar (1 hr)
EDUC 436: Supervised Teaching SH/MS (12 hrs)
EDUC 443: Curriculum \& Learning - Junior High/Middle School (3 hrs)
EDUC 451: Methods of Teaching Science SH/JH/MS (2 hrs)
Physics Requirements
PHYS 210: Calculus Physics I (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)
PHYS 213: Intro to Modern Physics (3 hrs)
PHYS 214: Modern Physics Lab (1 hrs)
PHYS 305: Mathematical Physics (3 hrs)
PHYS 312: Classical Mechanics (4 hrs)
PHYS 401: Advanced Electromagnetics (4 hrs)
PHYS 416: Statistical Thermodynamics (3 hrs)
PHYS 471: Quantum Mechanics (3 hrs)
MATH 222: Calculus II (4 hrs) OR
MATH 323: Calculus III (4 hrs) (MATH-324 recommended)
PHYS Elective (3 hrs)
Secondary Science Core
Complete 3 courses from outside the major. Courses may be used in conjunction with general education and major requirements.

Complete three courses from:
BIOL 107: General Biology (4 hrs)
CHEM 118: Principles of Chemistry (4 hrs)
ASTR 101: Descriptive Astronomy (3 hrs)
GEOG 230: Physical Geography (4hrs)

39 Hours of 300/400 level courses

## Professional Programs

Becauseofthefundamental natureandbreadth ofmany ofthedisciplinesofferedbytheUniversityofEvansville,thereareanumberofprogramsavailableforthestudentintendingtopursue a professional career.Mostofthese preprofessional preparatory programs aredesignedforthe studenttomeetbaccalaureaterequirementsalthoughadmissiontosomeprofessional programsis available prior to completion of an undergraduate degree.

## Pre-Dentistry

A four-year baccalaureate program in liberal arts with significant work in the natural sciences at the University of Evansville is recommended as a prerequisite to seeking admission into dental school.Successfulcompletion ofthefour-yearcurriculumsatisfiesadmissionrequirementsofmost dental schools. Contact the Pre-Professional Health Advisor with questions, Francie Renschler.

Common Pre-requisites for Admission to Dental School:
Biology (IU Dental requires 20 hours)
BIOL 107 or BIOL 119 (General Biology or Intro Biology - Molecular Perspectives)
BIOL 120 (Intro to Organismal Diversity)
BIOL 331 (Genetics)*
BIOL 430 or 442 (Microbiology or Immunology)
BIOL/EXSS 112 (Human Anat \& Phys I)
BIOL/EXSS 113 (Human Anat \& Phys II)
Chemistry (IU Dental requires 12 hours)
CHEM 118 (Principles of Chem)
CHEM 240 (Organic Chem I)
CHEM 341 (Organic Chem II)
CHEM 280 (Inorganic Chem)
CHEM 370/371 (Biochemistry \& lab)*
*Recommended courses, but not required
Physics
PHYS 121 (Algebra Physics I)
PHYS 122 (Algebra Physics II)
Social Science
PSYC 121 (Intro to Psychology) OR
COMM 130 (Intro to Communication)
Humanities
Choose at least 3 credithours of Foreign Language, English composition, Literature, Philosophy, or History

## NOTE:

Courserequirementsfordentalschoolsmayvary, pleasecheckanyschoolofinterestwebsite 100+ hours of job shadowing local dentists is recommended.
To be competitive - Maintain a GPA of 3.4 or higher, Score a 19 on DAT exam

## Pre-Law

Students planning to enter the legal profession areadvised to pursuebaccalaureate degree workinacademicareasbestsuitedtotheirinterests.Lawschoolsaremostinterestedinstudents whocancommunicateeffectively,readcomprehensively,andthinkcritically.Becauseadmission requirementsoflawschoolsvary,studentsneedtobecomeacquaintedwiththeadmissionprocess oftheschoolsthey hopetoattend.StudyinEnglish,economics,foreignlanguagesandcultures, history,legalstudies,logicandphilosophy,politicalscience,andsociologyisrecommended.Most lawschools do notrequire a specific pattern of courses, nordotheystipulatemajorsforconcentratedstudy.Acourseofstudyshouldbecarefully planned withthepre-lawadvisorandtheLaw School Admission Testshould be taken in conjunction with application to law school.Formore information, contact the pre-law advisor, Dr. Kevin Gray.

## Pre-Medicine

Astudent may be admitted to certain medical schools after three years ofundergraduate work. However, pursuit of a four-year baccalaureate program in liberal arts with significant work in the natural sciencesattheUniversityofEvansvilleis recommendedasaprerequisitetoseekingadmissionintomedicalschool.Successfulcompletion ofthefour-yearcurriculum satisfiesadmission requirementsofmost medical schools. A course of study should be carefully planned with the pre-medicine advisor, and the Medical College Admission Test shouldbetakenattheappropriatetime.ContactthePre-Professional Health Advisor with questions, Francie Renschler.

Common Pre-requisites for Admission to Medical School:

## Biology

BIOL 107 or BIOL 119 (General Biology or Intro Biology - Molecular Perspectives)

BIOL 120 (Intro to Organismal Diversity)
BIOL 331* (Genetics)
Chemistry
CHEM 118 (Principles of Chem)
CHEM 240 (Organic Chem I)
CHEM 280 (Inorganic Chem I)
CHEM 341 (Organic Chem II)
CHEM 370 (Biochemistry)
*Recommended for MCAT prep
Physics
PHYS 210 or 121 (Calc Physics I or Algebra Physics I)
PHYS 211 or 122 (Calc Physics II Algebra Physics II)
Mathematics
MATH 221 (Calculus I)* or MATH 134 (Survey of Calc)*

## Sociology

SOC 105 or 230 (Intro to Sociology or Social Problems in the Modern World)
Psychology
PSYC 121 (Intro to Psychology)
Ideally, courses should be completed before taking the MCAT exam
NOTE:
Course requirementsformedical schools may vary, please check any school of interest website

To be competitive - Maintain a GPA of 3.6 or higher, Score minimum 500 on MCAT exam

## Pre-Occupational Therapy

ContactthePre-ProfessionalHealthAdvisorwithquestionsFrancie Renschler.

## Common Pre-requisites for Admission to Occupational

Therapy Master's program:
Biology
BIOL/EXSS 112 (Human Anat \& Phys I)
BIOL/EXSS 113 (Human Anat \& Phys II)
BIOL 415 (Biostatistics) or QM 227 (Statistics)

## Social Science

PSYC 121 (Intro to Psychology)
PSYC 225 (Lifespan Developmental Psychology)
PSYC 259 (Abnormal Psychology) Health Sciences
HE 111 (Medical Terminology)
HS 205 (Pharmacology)
EXSS 356 (Biomechanics)
NOTE:
CourserequirementsforOTschoolsmayvary,pleasecheckanyschool of interest website

Application cycle is usually January - February before a fall start date
To be competitive - maintain a 3.5 GPA or higher

## Pre-Optometry

While most optometry schools will consider an applicant with threeyears ofundergraduatework, thestudentwhohas completeda baccalaureatedegreeisinamorecompetitive positionforadmission. The curriculum presented at the University of Evansville meets the requirements of the Indiana University School of Optometry and most other schools in the Midwest, though students considering optometry should becomefamiliar with expectations ofoptometry schoolstowhichtheymayapply.ContactthePre-ProfessionalHealth Advisor with questions, Francie Renschler.

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Common Pre-requisites for Admission to Optometry School:
Biology
    BIOL 107 or BIOL }119\mathrm{ (General Biology or Intro Biology - Molec-
ular Perspectives)
    BIOL }120\mathrm{ (Intro to Organismal Diversity)
    BIOL }430\mathrm{ (Microbiology)
    EXSS }112\mathrm{ (Human Anat & Phys I)*
    EXSS }113\mathrm{ (Human Anat & Phys II)*
Chemistry
    CHEM }118\mathrm{ (Principles of Chem)
    CHEM 280 (Inorganic Chem I)
    CHEM 240 (Organic Chem I)
    CHEM 370 (Biochemistry)
Physics
    PHYS }121\mathrm{ (Algebra Physics I)
    PHYS 122 (Algebra Physics II)
Psychology
    PSYC }121\mathrm{ (Intro to Psychology)
    PSYC 245 (Statistics for Psychologists)
MATH
    3 credit hours of math MATH 221 or 134
Humanities
    credit hours of Foreign Language
    credit hours of arts and humanities
    6credit hours of English Composition
    *Recommended, but not required
    Courserequirementsforoptometryschoolsmayvary,pleasecheck
any school of interest website
```

Maintain a GPA of 3.6 and an OAT score of 326
Rolling admissions - plan to apply early!

## Pre-Pharmacy

Admissiontoacollegeofpharmacygenerallyrequiressatisfactory completion oftwo years of academic workinbasicsciencesandliberal arts.Becauseadmissionrequirementsvary,pre-pharmacystudentsshould becomeacquaintedwiththespecificadmissionrequirementsofthepharmacycollegetowhichapplicationwillbemade.Thefollowingsuggested first-yearcurriculummeetstherequirementsofmostpharmacycolleges intheMidwest.ContactthePre-ProfessionalHealthAdvisorwithquestions, Francie Renschler.

Common Pre-requisites for Admission to Pharmacy School:

## Biology

BIOL 107 or BIOL 118, 119 (General Biology or Intro Biology -
Molecular Perspectives)
BIOL 120 (Intro to Organismal Diversity)
BIOL 110 (Clinical Microbiology)
BIOL 442 (Immunology)
BIOL/EXSS 112 (Human Anat \& Phys I)
BIOL/EXSS 113 (Human Anat \& Phys II)
Chemistry
CHEM 118 (Principles of Chem)
CHEM 240 (Organic Chem I)
CHEM 280 (Inorganic Chemistry I)
CHEM 341 (Organic Chem II)
CHEM 370/371 (Biochemistry \& lab)
Physics
PHYS 121 (Algebra Physics I)

## Math

MATH 221 (Calculus I)
MATH 222 (Calculus II)

## Other

COMM 210 (Professional Speaking)
QM 227 (Introduction to Statistics) or Stats for your major such as
BIOL 415 (Biostatistics)
FYS 112 (First Year Seminar)
ECON 102 (Principles of Microeconomics)
One Social Science class
NOTE:
To be competitive - Maintain a GPA of 3.0 or higher, C or better in pre-requisites

Courserequirementsforpharmacyschoolsmayvary,pleasecheckany school of interest website

## Pre-Physician Assistant:

ContactthePre-ProfessionalHealthAdvisorwithquestions,Francie Renschler.

Pre-requisites for Admission to UE Master of Physician Assistant Science:

Biology
BIOL 107 or BIOL 119* (General Biology or Intro Biology - Molecular Perspectives)

BIOL 110 or 430* (Clinical Microbiology or Microbiology)
BIOL/EXSS 112 (Human Anat \& Phys I)
BIOL/EXSS 113 (Human Anat \& Phys II)
Chemistry
CHEM 118 (Principles of Chem)
CHEM 280 (Inorganic Chem I)
CHEM 240 (Organic Chem I)
CHEM 341 (Organic Chem II)
Psychology
PSYC 121 (Intro to Psychology)
Social Science (one additional course)
Example: Anthropology, Cognitive Science, Communication, Economics, Gender/Women's Studies, Political Science, Sociology
Medical Terminology
HE 111 (Medical Terminology)
*Preferred course
NOTE:
To be competitive - Maintain GPA 3.6 or higher (minimum GPA 3.0), C or better in pre-requisites required, GRE Score minimum of 300 (Average for 2018 PA class was 307)
UE Master of PA program begins in January, so application cycle is
April-July of previous year

## Pre-Ministry

Students planning to attend theological school or seminary for ministerial preparation work in close consultation with the pre-ministry advisor to plan a course of study which meets their individual needs and vocational goals. Pre-ministry students must choose a major (pre-ministry is not a major). What major students choose will depend upon which pre-ministry track or path they decide is right for them. Students choose from the preferred admission/advanced standing track, the alternative track, and (for Catholic students) the Catholic ministry track.
Preferred Admission/Advanced Standing Track
Students take a religion major, with special focus on biblical and theological study, and completea NewTestament Greekminor. This istherecommendedcourseofstudyforstudentsseeking preference inadmission, preferenceinscholarshipaid, andadvanced standingat the seminary oftheirchoice.Advanced standing can beawarded for up to one-quarter of the total credits needed for completion of the seminary degree, allowing qualified students either to shorten the length oftimeneededforcompletion oftheirprogramortotakemore advanced courses (Association of Theological Schools, Educational Standards 7.4.1-3). Studentsalsocompletetwointernships, andmeet regularly for interaction and mentoring with a professional active in ministry.
Alternative Track
Studentschoosea major in any field, working with the pre-ministry advisor to map out an overall course of study that contributes to theirvocationalformation.Majors inthehumanities, such as archaeology,anthropology, arthistory,classicalstudies,economics, English, ethics and social change, foreign language, history, international
studies, music, philosophy, political science, psychology, religion, sociology,andcreativewriting,areespeciallyrecommended.Students also complete at least one internship, and meet regularly with a professional mentor active in their chosen field of ministry. This track serveswellstudentsplanningavocationinministryoutsidethemold of traditional pastoral ministry, as well as students considering the ministry but also weighing other career options.

## Catholic Ministry Track

Thistrackservesstudentsdiscerningavocationtothepriesthood, as well as students intending to pursue an M.A. in theology leading to certification as a lay ecclesial minister, such as director of religious education, catechist,director ofworship andliturgy, pastoral associate, director of social ministries, orlay hospital chaplain. Thestudent andthepre-ministryadvisorworkcloselytogetherwiththediocesan vocations director or the director of the office of catechesis to map out an individual plan of study offering optimal preparation for the student's intended program ofgraduatestudyandvocational goals.

## Preprofessional Clinical Psychology

Offered through the Department of Psychology, this program prepares students for graduate study in clinical psychology. Clinical psychology involves the study of abnormal behavior, psychological assessment,andthepsychotherapeutictreatmentofchildren,adolescents, and adults. Students major in psychology with a clinical psychology specialization as outlined in the "Psychology" section of this catalog.

## Preprofessional Clinical Social Work

Offered through the Department of Psychology, this program preparesstudentsforgraduatestudyinclinical socialwork, aspecialization withinthesocialworkprofession. Clinical social workinvolves thepsychotherapeutictreatmentofchildren,adolescents,andadults. Studentsmajorinpsychologywithaclinical social workspecialization as outlined in the "Psychology" section of this catalog.

## Preprofessional Social Work

This minor helps to prepare students for graduate study in social work.Admissionrequirementsofgraduatesocialworkprogramsvary, butthecourses includedinthe sociologymajorand preprofessional social work minor provide a solid foundation in the behavioral sciences and other areas related to the practice of social work. Course requirements are outlined in the "Law, Politics, and Society" section of this catalog.

## Pre-Veterinary Medicine

Theadmission requirementsofveterinarymedicineschoolsvary, but the University of Evansville's recommendations meet the requirements of the Purdue University School of Veterinary Medicine as wellasmanyotherschoolsthroughouttheUnitedStates.Contactthe Pre-Professional Health Advisor with questions, Francie Renschler.

## Common Pre-requisites for Admission to Veterinary School:

## Biology

BIOL 107 or BIOL 119 (General Biology or Intro Biology - Molecular Perspectives)

BIOL 120 (Intro to Organismal Diversity)
BIOL 331 (Genetics)
BIOL 430 (Microbiology)
BIOL/EXSS 112 (Human Anat \& Phys I)*
BIOL/EXSS 113 (Human Anat \& Phys II)*
Chemistry
CHEM 118 (Principles of Chem)
CHEM 240 (Organic Chem I)
CHEM 280 (Inorganic Chem I)
CHEM 341 (Organic Chem II)
CHEM 370 (Biochemistry)
Physics
PHYS 121 (Algebra Physics I)
PHYS 122 (Algebra Physics II)
*required for some/not all vet schools
Other
COMM 210 (Professional Speaking)
FYS 112 (English Composition)
Humanities Electives (3 semesters)
QM 227 (Introduction to Statistics) or Stats for your major such as BIOL 415 (Biostatistics)

Animal Nutrition (not offered at UE)
Courserequirementsforveterinaryschoolsmayvary, pleasecheck any school of interest website

Maintain a GPA of 3.3 (3.6 or higher in science courses); GRE or MCAT required for some Vet schools

Variety of clinical experience is expected

## Psychology

## Bachelor of Arts or Bachelor of Science with a Major in Psychology

## Bachelor of Science <br> with a Major in Neuroscience

## Psychology

Psychologyisthestudyofbehavioraswellasthemental,biological,andsocial processes related tobehavior.Asascience, psychologyresearchesthe causes ofbehavior;asa profession,itapplies these findings to improve human health and well-being.

Students who major in psychology have preparation for a career in social services, criminal justice, business, industry, or public relations. They are also prepared for graduate studies in psychology or related fields such as law, business, social work, or counseling.

TheBachelorofArtsandBachelorofSciencedegreesare offered with a majorin psychology. Students pursuing the Bachelor of Arts degree may not earn more than 45 hours of psychology credittowardgraduationandmustmeetforeignlanguage proficiencyrequirementsatthesec-ond-yearlevel.FortheBachelorofScience degree,studentsmustmeetforeignlanguage proficiency requirements at the first-year level. A minor in psychology is offered for students who wanttogainhelpfulknowledgeofbehaviorrelevanttoawiderangeoffields includingbusiness, communication, public relations, criminal justice, education, health sciences, the humanities, law, and other social sciences.

Psychology Minor (18 hours)
Psychology 121 and a minimum of 15 hours in psychology electives, at least 6 of which are at the300-or400-level, selectedinconsultation withmajoradvisorand psychologyminoradvisor

## Neuroscience

## Director: Lora Becker

Studentsinterestedinhowthebrain regulatesthoughtsandbehaviormayearnaBachelorof Sciencedegreewithamajorinneuroscience.Thisinterdisciplinaryprogramcombinescoursesfrom psychology,biology, chemistry, andothersciencestounderstandthestructureandfunctionofthe nervoussystem.Completion ofthis program, through consultationwithone'sacademicadvisor, prepares students for graduate training in neuroscience, including thebehavioral, cognitive, or molecularfields.Thisprogramalsofulfillsadmission requirementsformostmedicalschoolsand otherhealthcareprofessionalschools.Eventual careeroptionsincludeteaching andresearchasa university professor,employmentwithapharmaceuticalorbiotechnologycompanyasaresearch scientist, and practice as a physician or other health care provider.
Neuroscience Minor (22 hours)
Neuroscience 125, 126, 355, 360; and at least 11 hours from: Biology 333; Cognitive Science 498; Neuroscience 357, 358, 411, or 499; Psychology 366, 450, or 466.

## Bachelor of Arts

## PSYCHOLOGY

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements

## (47 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- NEUR 125: Introduction to Neuroscience (min. grade of C-)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
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-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- PSYC 490: Senior Review and Thesis

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (39 hours)
PSYC 121: Intro to Psychology (3 hrs)
PSYC 201: Psych: Fields of Application (1 hr)
PSYC 229: Social Psychology (3 hrs)
PSYC 245: Statistics for Psychologist (4 hrs)
PSYC 246: Research Methods in Psychology (4 hrs)
PSYC 259: Abnormal Psychology (3 hrs)
NEUR 125: Introduction to Neuroscience (3 hrs)
Complete one course from:
PSYC 225: Lifespan Development (3 hrs)
PSYC 226: Child and Adolescent Psychology (3 hrs)
Complete 15 hours from PSYC
COGS 498 - Seminar in Cognitive Science can substitute for one of these courses.

Free Electives (34 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## PSYCHOLOGY

2019-2020 | 120 Hours Required
Enduring Foundations General Education Requirements
(41 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- NEUR 125: Introduction to Neuroscience (min. grade of C-)
- 

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- PSYC 490: Senior Review and Thesis

Overlay: Writing Across the Curriculum (4 courses)
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## Bachelor of Science

## NEUROSCIENCE

2019-2020 | 122 Hours Required

## Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus or MATH 221: Calculus I

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry
- BIOL 119: Intro Biology: Molecular Perspectives

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
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Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (49 hours)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 331: Genetics (4 hrs)
BIOL 427: Animal Physiology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 341: Organic Chemistry II (5 hrs)
CHEM 370: Biochemistry I (3 hrs)
CHEM 371: Biochemistry I Lab (1 hrs)
NEUR 125: Introduction to Neuroscience (3 hrs)
NEUR 126: Neuroscience Techniques (2 hrs)
NEUR 355: Sensation and Perception (3 hrs)
NEUR 360: Neuropharmacology (3 hrs)
NEUR 411: Molecular Neuroscience (4 hrs)
PSYC 245: Statistics for Psychologist (4 hrs)
PSYC 246: Research Methods in Psychology (4 hrs)
Complete one course from:
NEUR 479: Research in Neuroscience ( $0-3 \mathrm{hrs}$ )
NEUR 489: Internship in Neuroscience ( $0-3 \mathrm{hrs}$ )
TRACK
Complete 12 hours from one of the tracks below:
Behavioral Neuroscience Track
BIOL 333: Animal Behavior (3 hrs)
COGS 498: Seminar in Cognitive Science (3 hrs)
NEUR 499: Special topics in Neuroscience (1-3 hrs)
PSYC 259: Abnormal Psychology (3 hrs)
PSYC 366: Cognitive Psychology (3 hrs)
PSYC 450: Learning (3 hrs)
PSYC 466: Cognitive Development (3 hrs)
4 hours may be from one of the following:
PHYS 121: Algebra Physics I (4 hrs)
PHYS 122: Algebra Physics II (4 hrs)
PHYS 210: Calculus Physics I (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)
Molecular Neuroscience Track
BIOL 340: Cellular and Molecular Biology (4 hrs)
BIOL 425: Developmental Biology (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CHEM 473: Biochemistry (3 hrs)
CHEM 474: Biochemistry ( 1 hrs )
NEUR 499: Special topics in Neuroscience (1-3 hrs)
4 hours may be from one of the following:
PHYS 121: Algebra Physics I (4 hrs)
PHYS 122: Algebra Physics II (4 hrs)
PHYS 210: Calculus Physics I (4 hrs)
PHYS 211: Calculus Physics II (4 hrs)
Free Electives (18 hours)

39 Hours of 300/400 level courses

## Race and Ethnicity Studies

Faculty: Shelby, Stein (director), Stevenson

Aninterdisciplinaryminorinwhichstudentscritically examinethecomplexityandconstructions of raceandethnicity indifferentsocio-historical and cultural contexts. Theminorincludes experientialeducationinwhichdirectexperiencewithracial/ethnicissuesissupportedbycritical analysis. Students complete a common core and work with an advisor to select from a range of electivecourseswhichincludeoptionsinthehumanities,socialsciences,education, and public health. The minor prepares students from a wide variety of majors to engage an increasingly diverse world as informed, ethical citizens.

## Race and Ethnicity Studies Minor

The Race and Ethnicity Studies minor requires the completion of 18 credit hours consisting of a common core, experiential education, and two electives.

Religion 275, Psychology 431, Sociology 438; 3 hours of anti-bias workshop or pre-approved Changelab class, internship or undergradate research; and 6 hours of elective courses from Anthropology 310, 315, 319, Communication 380, Education 385, English 361, Ethics 200, French 333, Gender and Womens Studies 101, History 321, 323, 343, 349, Publich Health 360, Philisophy 321, 450, Psychology 229, Religion 120, 305, 345, Race and Ethnicity Studies 492, 493, Spanish 333, 320, or 433.

# Bachelor of Fine Arts or Bachelor of Science with a Major in Theatre Performance 

Bachelor of Fine Arts or Bachelor of Science with a Major in Theatre Design and Technology

Bachelor of Science with a Major in Stage Management

Bachelor of Science<br>with a Major in Theatre Studies

Bachelor of Science with a Major in Theatre Management

Thecoursesofstudy intheatreareofferedforstudentswhoplancareersinprofessionaltheatre or intend to continue their study at the graduate level and for those seeking an intellectual and aestheticappreciation oftheatreasacomplementtoabroadliberalartsandscienceseducation.

## Theatre Admission Requirements

To seek admission into the Department of Theatre, new students must make formal application to the University as well as audition for or interview with the Department of Theatre faculty. This requirement applies also to transfer students and students currently enrolled at theUniversity ofEvansville whoare seeking entry orre-entry intothedepartment.Acceptance based on University admission requirements and the audition or interview will classify the new theatre student as provisional. Admission to full candidacy status for one of the several theatre degreeprogramswillbegrantedafterstudentshavesatisfactorilycompletedthespecificnumber oflower-divisioncourses.Studentsalsoareexpectedtodemonstratepotentialappropriatetothe goals establishedfor the degree and majorthey are pursuing. Althoughfull candidacy willusually be granted at the end of the first year, circumstances may require earlier or later acceptance. All students and their degree programs will be reviewed annually by the theatre faculty. Retention is contingent upon the student having met the guidelines outlined in the Theatre Handbook and satisfactory completion of the review process.

## Bachelor of Fine Arts

The Bachelor of Fine Arts degree with a concentration in theatre is designed for students seeking professionaltraininganddesiringanintensiveprogramintheatrecurriculum.Students following this degree program pursue a course of study with a high degree of specialization in eithertheatre performance(acting ordirecting) ortheatredesignandtechnology (scene,light, costume, sound design, and technical direction). The philosophy of the BFA degree program is to encourage students to explore the total theatre experience by developing an overall view of theatre as an artform while perfecting specific career specializations within the liberal arts and sciences environment

Theatre Performance Major: The primary emphasis of this curriculum is actor training with its attendant disciplines. Students may also develop a secondary emphasis in directing.

Theatre Design and Technology Major: Students are directed toward the development of design skills (scenic, lighting, sound, and costume) as well as technical theatre.

## Bachelor of Science

TheBachelorofScience degree with a concentration intheatre is designedforstudents who wishtoconcentrateintheatreaswellasexploreotherdisciplines. Thecurriculumallowsthestudenttodevelop, withadvisorapproval,abroad-basededucational programthatmeetsindividual desires and abilities. This degree is particularly suitable for students who wish to study theatre withoutconfiningthemselvestoaparticularareaofspecialization, butitcanalsoallowstudents to enhance areas of specialization with a closely related program ofstudy (e.g., a theatre design studentwithanassociatedstudyinartoratheatreperformancestudentwithanassociatedstudy in literature).Students pursuing the BS degreechoose one offive majors:theatre performance, theatre design and technology, stage management, theatre studies, or theatre management.

TheBachelorofSciencewithamajorinstagemanagementcombinesclasses intheatre,management, andcommunicationsforthestudentinterestedina careerinstagemanagement.This curriculumallowsthestudenttodevelopabroad-basededucational programthatmeetsindividualdesiresandabilitieswhilespecializinginstagemanagement.Studentsareallowedtoenhance this area ofspecialization with aclosely related program ofstudythroughtherequirementofan associated study.

The Bachelor of Science with a major in theatre studies allows students with broad interests inthetheatretoexploreanin-deptheducationinmultipleareas ofthetheatre.Thefreeelectives allowforindividual customizationofthisdegreewith additional coursesintheatreorotherareas of interest, including associated studies or minors.

TheBachelorofSciencewithamajorintheatremanagementcombinestheatre,business,and communication studies for the student interested in a career in arts management and administration. Because of its dual emphasis, this program has different departmental requirements for general education, core curriculum, and theatre practicum, and it includes a minor in business administration.

## Bachelor of Fine Arts

## THEATRE PERFOMANCE

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
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Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- THTR 465: Senior Seminar in Theatre OR THTR 472: Acting VIII: Advanced Project

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Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements ( 60 hours)
THTR 111: Fundamentals of Acting (3 hrs) OR
THTR 171: Acting I: Process Awareness (3 hrs)
THTR 125: Introduction to Makeup \& Costumes (3 hrs)
THTR 130: Color \& Design for Theatre (3 hrs)
THTR 160: Survey \& Analysis of Dramatic Literature (3 hrs)
THTR 361: Theatre History I (3 hrs)
THTR 362: Theatre History II (3 hrs)
Complete 2 hours from each:
THTR 190: Theatre Practicum (1 hr)
THTR 290: Theatre Practicum (1 hr)
THTR 390: Theatre Practicum (1 hr)

## Performance Core:

ENGL 350: Shakespeare (3 hrs)
THTR 225: Makeup (3 hrs)
THTR 375: Acting in Dialect (3 hrs)
THTR 481: Directing I (3 hrs)
Complete one course from:
THTR 363: Period Styles Theatre 1: Architecture \& Decor (3 hrs)
THTR 364: Period Styles Theatre 2: Costume History (3 hrs)
Dance Elective: Complete two hours from:
THTR 245: Dance I (2 hrs)
THTR 246: Dance I (2 hrs)
THTR 345: Dance II (2 hrs)
THTR 346: Dance II (2 hrs)
Voice Elective: Complete one hour from:
Options include APM 123, 124, 223, 224, 323, 324, 423, 424

## Theatre Electives

- Complete electives as needed to total 60 hrs in Theatre.
- Minimum of 27 hrs in acting, dance, voice, and directing (including courses from the core curriculum).
- Must include a non-performance elective of 3 hrs .

Free Electives (19 hours)
Must include 3 credits from fine arts, outside of Theatre.

39 Hours of 300/400 level courses

## Bachelor of Science

## THEATRE PERFORMANCE

## 2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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.
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- THTR 465: Senior Seminar in Theatre OR THTR 472: Acting VIII: Advanced Project

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements ( 66 hours)
THTR 111: Fundamentals of Acting (3 hrs) OR
THTR 171: Acting I: Process Awareness (3 hrs)
THTR 112: Fundamentals of Acting (3 hrs) OR
THTR 172: Acting II: Process Awareness (3 hrs
THTR 125: Introduction to Makeup \& Costumes (3 hrs)
THTR 130: Color \& Design for Theatre (3 hrs)
THTR 160: Survey \& Analysis of Dramatic Literature (3 hrs)
THTR 361: Theatre History I (3 hrs)
THTR 362: Theatre History II (3 hrs)
THTR 190: Theatre Practicum (2hrs)
THTR 290: Theatre Practicum (2hrs)
THTR 390: Theatre Practicum (2hrs)
THTR 481: Directing I (3 hrs)
Dance Elective: Complete two hours from:
THTR 245: Dance I (2 hrs)
THTR 246: Dance I (2 hrs)
THTR 345: Dance II (2 hrs)
THTR 346: Dance II (2 hrs)
Voice Elective: Complete one hour from:
Options include APM 123, 124, 223, 224, 323, 324, 423, 424
Theatre Performance
Complete 12 hours of theatre performance electives.
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## Associated Study

Complete 21 hours outside of Theatre.
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Free Electives (13 hours)
Must include 3 credits from fine arts, outside of Theatre.
39 Hours of 300/400 level courses

## Bachelor of Fine Arts

## THEATRE DESIGN AND TECHNOLOGY

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- THTR 435: Senior Portfolios Career Prep OR THTR 465: Senior Seminar in Theatre

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements ( 63 hours)
THTR 111: Fundamentals of Acting (3 hrs) OR
THTR 171: Acting I: Process Awareness (3 hrs)
THTR 125: Introduction to Makeup \& Costumes (3 hrs)
THTR 130: Color \& Design for Theatre (3 hrs)
THTR 160: Survey \& Analysis of Dramatic Literature (3 hrs)
THTR 361: Theatre History I (3 hrs)
THTR 362: Theatre History II (3 hrs)
Complete 2 hours from each:
THTR 190: Theatre Practicum (1 hr)
THTR 290: Theatre Practicum (1 hr)
THTR 390: Theatre Practicum (1 hr)
Design and Technology Core
ENGL 350: Shakespeare (3 hrs)
THTR 120: Production Techniques I (3 hrs)
THTR 135: Graphic Communication for Theatre (3 hrs)
Complete one course from:
THTR 220: Production Techniques II (3 hrs)
THTR 221: Production Techniques III (3 hrs)
THTR 225: Makeup (3 hrs)
THTR 226: Costume Construction (3 hrs)
Complete one course from:
THTR 335: Scene Design (3 hrs)
THTR 336: Lighting Design (3 hrs)
THTR 337: Costume Design (3 hrs)
Complete one course from:
THTR 363: Period Styles Theatre 1: Architecture \& Decor (3 hrs) THTR 364: Period Styles Theatre 2: Costume History (3 hrs)

Theatre Electives

- Complete electives as needed to total 63 hrs in Theatre.
- Minimum of 27 hrs in design/technical production, in costume construction (including courses from the core curriculum).
- Must include a non-design/technology elective of 3 hrs .

Free Electives (16 hours)
Must include 3 credits from fine arts, outside of Theatre.

39 Hours of 300/400 level courses

## Bachelor of Science

## THEATRE DESIGN AND TECHNOLOGY

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
.
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- THTR 435: Senior Portfolios Career Prep OR THTR 465: Senior Seminar in Theatre
Overlay: Writing Across the Curriculum (4 courses)
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Associated Study - 21 hours (outside of Theatre)
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Free Electives (16 hours)
39 Hours of 300/400 level course

## Bachelor of Science

## STAGE MANAGEMENT

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- THTR 435: Senior Portfolios Career Prep OR THTR 465: Senior Seminar in Theatre

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (72 hours)
THTR 111: Fundamentals of Acting (3 hrs) OR
THTR 171: Acting I: Process Awareness (3 hrs)
THTR 120: Production Techniques I (3 hrs)
THTR 125: Introduction to Makeup and Costumes (3 hrs)
THTR 130: Color \& Design for Theatre (3 hrs)
THTR 135: Graphic Communication for Theatre (3 hrs)
THTR 160: Survey \& Analysis of Dramatic Literature (3 hrs)
THTR 350: Stage Management (3 hrs)
THTR 361: Theatre History I (3 hrs)
THTR 362: Theatre History II (3 hrs)
THTR 400: Theatre Management (3 hrs)
THTR 481: Directing I (3 hrs)
THTR 499: Internship (0-12 hrs)
ACCT 210: Intro to Financial Accounting (3 hrs) OR
COMM 388: Organizational Communication (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
Complete 2 hours from each:
THTR 190: Theatre Practicum (1 hr)
THTR 291: Theatre Practicum (1 hr)
THTR 391: Theatre Practicum (1 hr)
Complete one course from:
THTR 220: Production Techniques II (3 hrs)
THTR 221: Production Techniques III (3 hrs)
THTR 225: Makeup (3 hrs)
THTR 226: Costume Construction (3 hrs)
Complete one course from:
THTR 335: Scene Design (3 hrs)
THTR 336: Lighting Design (3 hrs)
THTR 337: Costume Design (3 hrs)
Complete 21 hours outside of Theatre

- Hours of $300 / 400$ level courses
Free Electives (7 hours)
Must include 3 credits from fine arts, outside of Theatre.
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## Bachelor of Science

## THEATRE STUDIES

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- THTR 435-Senior Portfolios Career Prep OR

THTR 465: Senior Seminar in Theatre, OR THTR 472: Acting III: Advanced Project
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (54 hours)
THTR 111: Fundamentals of Acting (3 hrs) OR
THTR 171: Acting I: Process Awareness (3 hrs)
THTR 112: Fundamentals of Acting (3 hrs) OR
THTR 172: Acting II: Process Awareness (3 hrs)
THTR 125: Introduction to Makeup \& Costumes (3 hrs)
THTR 130: Color \& Design for Theatre (3 hrs)
THTR 160: Survey \& Analysis of Dramatic Literature (3 hrs)
THTR 361: Theatre History I (3 hrs)
THTR 362: Theatre History II (3 hrs)
THTR 120: Production Techniques I (3 hrs)
THTR 135: Graphic Communication for Theatre (3 hrs)
THTR 440: Director/Designer Collaboration (3 hrs)
THTR 481: Directing I (3 hrs)
ENGL 350: Shakespeare (3 hrs)
Complete 2 hours from each:
THTR 190: Theatre Practicum (1 hr)
THTR 290: Theatre Practicum ( 1 hr )
THTR 390: Theatre Practicum (1 hr)
Complete one course from:
THTR 335: Scene Design (3 hrs)
THTR 336: Lighting Design (3 hrs)
THTR 337: Costume Design (3 hrs)
Complete one course from:
THTR 363: Period Styles Theatre 1: Architecture \& Decor (3 hrs)
THTR 364: Period Styles Theatre 2: Costume History (3 hrs)
ARTH 208: Survey of Art I (3 hrs)
ARTH 209: Survey of Art II (3 hrs)
Complete one course from:
THTR 350: Stage Management (3 hrs)
THTR 400: Theatre Management (3 hrs)
Complete 3 additional hours from Theatre
-

Free Electives ( 25 hours)
Must include 3 credits from fine arts, outside of Theatre.

39 Hours of 300/400 level courses

## Bachelor of Science

## THEATRE MANAGEMENT

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

- PHIL 121: Introduction to Ethics

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
.
Outcome 7: (3 hrs) Quantitative Literacy

- QM 227: Introduction to Statistics

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 102: Principles of Microeconomics
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- THTR 435: Senior Portfolios Career Prep OR THTR 465: Senior Seminar in Theatre
Overlay: Writing Across the Curriculum (4 courses)
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39 Hours of 300/400 level courses

## SchroederFamily School ofBusiness Administration

## Ben Johnson, Interim Schroeder Family Dean

Business administration is an interdisciplinary field of study that leadstodynamicandrewarding careersinglobalcommerceorpublic service. AttheUniversity of Evansville, the business majoris based on four important principles. First, the curriculum embraces the spirit of traditionalliberalartsandscienceseducation. Second, the contentof the programisglobalinnature,recognizingthefact thatworlddevel-opmentsintradeandcommercehavecometotranscendtheboundariesofnationsandcultures.Third, degreerequirementsallowstudents to reach beyond the traditional limits of business courses to include otherareasofstudy.Finally,studentsare equiredtocompleteinternshipsandareencouragedtotakeadvantageofworkopportunitiesthat connecttheirformalacademictrainingwithmeaningfulexperiencesin a variety of professional settings.

There is no practical limit to the range of career opportunities for students who prepare themselves carefully for the challenges of global business. In addition, the University of Evansville program offersexcellentpreparationforgraduatestudyinbusiness,law,anda variety of other fields.

## Mission Statement

We prepare undergraduate students in a liberal arts framework to becomeglobally aware business professionals. Weare distinctive in experiential learning, career support, and faculty scholarship in a balanced teacher-scholar environment.

## Statement of Principles

Consistent with the values and mission of the University, it is the objectiveoftheSchroederFamilySchool ofBusinessAdministration toproducebusinessalumniwhohaveanintegratedunderstandingof businessprinciplesandperspectivesnecessaryforeffectiveleadership. Consequently, students will:

- Master communication, organizational, and critical thinking skills
- Acquire a broad foundation in the liberal arts and sciences throughgeneraleducationtogetherwithadepthofknowledgein one or more disciplines of their choice
- Understandtheethicalsignificanceoftheirpersonalandprofessional decisions
- Understand the global nature of our world, learn about other cultures, and appreciate diversity and tolerance
- Have the opportunity to participate in international studies programs
- Understand the necessity of being actively involved through involvementinstudy, internships, andextracurricularactivities


## Bachelor of Science in Accounting

Bachelor of Science in Business Administration with a Major in Finance

Bachelor of Science in Business Administration with a Major in Global Business

Bachelor of Science in Business Administration with a Major in Logistics and Supply Chain Management

Bachelor of Science in Business Administration with a Major in Management

Objectives of the Degree Programs
TheSchroederFamilySchool ofBusinessAdministrationoffersdegreeprogramsinaccounting, economics, and business administration.

The principal objective of our programs is to develop potential leaders who have a broad background in the liberal arts, possess an awareness of the social responsibilities of corporate leadership, and havethoroughknowledge offundamentaltools ofdecision-makinginaglobal context.TheBachelorofScienceinAccounting degreeis offeredforstudentsdesiring careersin corporate or public accounting. The Bachelor of Science in Business Administration degree is offered with majors in finance, global business, logistics and supply chain management, management, and marketing.

## Requirements for Degree Programs

- Minimum Grade Policy: Students are required to (1) earn a grade of C- or better in the prerequisitesforanyupper-levelSchroederSchool coursesoutsideofthebusinesscore;(2) earn a grade of C- or better in the prerequisites for MGT 497 (senior seminar); and (3) earn a grade of C- or better in MGT 497.
- Course Level Policy: Normally, students will not enroll in 200-level business courses before the third semester. After completion of the third semester, students may enroll in FIN 361, MGT 310, MGT 311, MGT 377, or MKT 325 if prerequisites are satisfied. After completionofthefourthsemester,studentsmayenrollinother300-and 400 -levelbusiness courses for which prerequisites have been satisfied. Exceptions that permit earlier enrollments include but are not limited to the following:
- Students with formal plans to study at Harlaxton or in some other program of study abroad
- Students who wish to avail themselves of opportunities to take 300-and 400-level courses that are offered only on an alternate year basis and for which the alternate year scheduling cycle is stated with the catalog course description
- Students with exceptional preparation through advanced placement or credit by exam that warrants early enrollment
- Studentswhorequirepreparationspecifictotherequirementsofplannedinternships
- Minimum GPA requirement: Minimum 2.5 gpa required in each major area of study. A minimum 2.0 gpa mustbemaintainedinthebusinessadministration core.Students must also satisfy the university's graduation requirement of 2.0 gpa for total program of study.
- On-line Policy: A maximum of four business core courses and two major courses may be completed online.
- Transfer Credit Policy:Transfer credit not accepted for any business school course previously failed or withdrawn fromat UE. Appeals to this policy may be made tothe Schroeder School Academic Standards Committee.
- Double-counting of courses in the business core or across majors is not permitted.
- Fortransfer students, atleast 50 percent ofthe business credithours required for a degree from the Schroeder Family School of Business Administration must be earned at the University of Evansville.
- It is recommended that no more than 50 percent of a business student's total credit hours (excluding Economics 101, 102 and Quantitative Methods 160,227) be taken in the Schroeder Family School of Business.
- Students studying outside the Schroeder Family School of Business Administration and planningtoearnmorethan 25 percentoftheirworkinbusinessandeconomics(excluding Economics 101, 102 and Quantitative Methods 160,227) must earn a Bachelor of Science in Accounting or a Bachelor of Science in Business Administration.


## Bachelor of Science in Business Administration with a Major in Marketing

## Co-op Program in Business Administration

Acooperativeeducation planforaccountingandbusinessstudentsis availableas analternative to the traditional four-year plan. The co-op plan combines classroom education with full-time workexperienceintheindustry.PleaserefertoSpecialEducationalOpportunitieslocatedinthe Degrees, Curriculum, Academic Opportunities section in this catalog.

Business Administration Minor (21 hours)
Accounting 210; Economics 102; Finance 361; Management 377; Marketing 325; six hours of 300- or 400-level courses in the Schroeder Family School of Business Administration for which the student has satisfied the appropriate prerequisites. This excludes internship, independent study, and special topics courses.

In addition to the 21 hoursforthe minor, the studentmay takeother business courses for which he or she has the appropriate prerequisites; however, no more than nine additional hours in business courses (excluding Economics 101, 102 and Quantitative Methods 160, 227) will apply toward graduation requirements.

## Bachelor of Science in

## ACCOUNTING

2019-2020 | 124 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

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Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus (or MATH 221)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 101: Principles of Macroeconomics*
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MGT 497: Global Strategic Management (Minimum grade C-)

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements ( 63 hours)
Business Administration Core
ECON 101: Principles of Macroeconomics (3 hrs)*
ECON 102: Principles of Microeconomics (3 hrs)
ID 150: The American Corporation (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
QM 227: Introduction to Statistics (3 hrs)
ACCT 210: Introduction to Financial Accounting (3 hrs)
ACCT 211: Introduction to Managerial Accounting (3 hrs)
LAW 201: Legal Environment of Business (3 hrs)
EXED 090: Building a Professional Image (0 hrs)
ACCT 321: Accounting Information Systems (3 hrs)
ACCT 398: Internship in Accounting (3 hrs)**
FIN 361: Fundamentals of Finance (3 hrs)
MGT 310: Production/Operations Management (3 hrs)
MGT 331: International Business Strategy (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
BUS 400: ACES Passport Program (0 hrs)
AccountingRequirements(Doublecountingofcoursesacrossmajorsisnot permitted. No hours of internship apply. Minimum 2.5 GPA required.)
ACCT 310: Intermediate Accounting I (3 hrs)
ACCT 311: Intermediate Accounting II (3 hrs)
ACCT 317: Cost Accounting (3 hrs)
ACCT 329: Introduction to Taxation (3 hrs)
ACCT 414: Auditing (3 hrs)
Complete 6 hours 300/400 level accounting or business courses
Free Electives (20 hrs)

39 Hours of 300/400 level courses

NOTES:

- *Satisfiesbothageneraleducationandamajorrequirementfor a total of 3 hours in one area only.
- **ACCT 499 Professional Internship may be used to satisfy the requirement for ACCT 398. COOP 091 may be used to satisfy the ACCT398 requirement butno credithours will beawarded.
- Enrollmentinupperlevelbusinessschoolcoursesoutsideofthe business administration core requires a grade of C - or better in their prerequisites.
- Amaximumoffourbusinesscorecoursesandtwomajorcourses may be completed online.
- Transfer credit not accepted for any business school course (departmentACBUcourse) previouslyfailedorwithdrawnfrom at UE. Appeals to this policy may be made to the Schroeder School Academic Standards Committee.


## Bachelor of Science in

## BUSINESS ADMINISTRATION: FINANCE

2019-2020 | 124 Hours Required

Enduring Foundations General Education Requirements (41 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
.
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus (or MATH 221)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 101: Principles of Macroeconomics*
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MGT 497: Global Strategic Management (Minimum grade C-)

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (60 hours)
Business Administration Core
ECON 101: Principles of Macroeconomics (3 hrs)*
ECON 102: Principles of Microeconomics (3 hrs)
ID 150: The American Corporation (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
QM 227: Introduction to Statistics (3 hrs)
ACCT 210: Introduction to Financial Accounting (3 hrs)
ACCT 211: Introduction to Managerial Accounting (3 hrs)
LAW 201: Legal Environment of Business (3 hrs)

EXED 090: Building a Professional Image (0 hrs)
BUS 398: Internship in Business ( 3 hrs )**
FIN 361: Fundamentals of Finance (3 hrs)
MGT 310: Production/Operations Management (3 hrs)
MGT 311: Management Information Systems (3 hrs)
MGT 331: International Business Strategy (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
BUS 400: ACES Passport Program (0 hrs)
FinanceRequirements(Doublecounting ofcoursesacrossmajorsisnotpermitted. No hours of internship apply. Minimum 2.5 GPA required.)
FIN 362: Corporate Financial Policy (3 hrs)
Complete 5 or more courses selected from:
FIN 426: International Financial Management (3 hrs)
FIN 427: Financial Derivatives and Alt. Investments (3 hrs)
FIN 462: Investments (3 hrs)
FIN 470: Financial Institutions and Markets (3 hrs)
FIN 478: Risk Management (3 hrs)
FIN 482: Financial Planning: Process \& Environment (3 hrs)
FIN 380: Special Topics in Finance (3 hrs)***
FIN 395: Independent Study (3 hrs)***
--May apply 3 hours maximum from the following:
FIN 383: Credit Analysis Lending Practicum I (3 hrs)
FIN 384: Credit Analysis Lending Practicum II (3 hrs)
FIN 385: Wealth Management Practicum I (2 hrs)
FIN 386: Wealth Management Practicum II (2 hrs)
--May substitute two 300/400 level courses (6 hours) with a prefix of ACCT, BUS, ECON, LAW, LSCM, MGT, MKT or QM.

Free Electives (23 hrs)

39 Hours of 300/400 level courses
NOTES:

- *Satisfiesbothageneraleducationandamajorrequirementfor a total of 3 hours in one area only.
- **COOP 091 may be used to satisfy BUS 398, but no credit hours are earned.
- ***Only one independent study or special topics course will be counted in the major. Additional independent study or special topics course hours will count as free electives.
- Enrollmentinupperlevelbusinessschoolcoursesoutsideofthe business administration core requires a grade of C - or better in their prerequisites.
- Amaximumoffourbusinesscorecoursesandtwomajorcourses may be completed online.
- Transfer credit not accepted for any business school course (departmentACBUcourse) previouslyfailedorwithdrawnfrom at UE. Appeals to this policy may be made to the Schroeder School Academic Standards Committee.


## Bachelor of Science in

## BUSINESS ADMINISTRATION: GLOBAL BUSINESS

2019-2020 | 124 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking - FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
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Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus (or MATH 221)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 101: Principles of Macroeconomics*
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MGT 497: Global Strategic Management (Minimum grade C-)

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (66 hours)

Business Administration Core
ECON 101: Principles of Macroeconomics (3 hrs)*
ECON 102: Principles of Microeconomics (3 hrs)
ID 150: The American Corporation (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
QM 227: Introduction to Statistics (3 hrs)
ACCT 210: Introduction to Financial Accounting (3 hrs)
ACCT 211: Introduction to Managerial Accounting (3 hrs)

> LAW 201: Legal Environment of Business (3 hrs) EXED 090: Building a Professional Image (0 hrs) BUS 398: Internship in Business (3 hrs)** FIN 361: Fundamentals of Finance (3 hrs) MGT 310: Production/Operations Management (3 hrs) MGT 311: Management Information Systems (3 hrs) MGT 331: International Business Strategy (3 hrs) MGT 377: Organizational Behavior (3 hrs) MKT 325: Principles of Marketing (3 hrs) BUS 400: ACES Passport Program (0 hrs)  GlobalBusinessRequirements(Doublecountingofcoursesacrossmajorsisnot permitted. No hours of internship apply. Minimum 2.5 GPA required.) Complete 6 courses selected from the following: BUS 365: Contemporary European Business Issues (3 hrs) ECON 425: International Trade (3 hrs) ECON 435: International Monetary Economics (3 hrs) FIN 426: International Financial Management (3 hrs) MGT 392: Managing Global Relationships ( 3 hrs) MGT 455/LSCM 315: Intro to Logistics/Supply Chain Mgt ( 3 hrs) MKT 477: International Marketing (3 hrs) --May substitutetwo 300/400 level courses (6 hours) with a prefix of ACCT, BUS, ECON, FIN, LAW, LCSM, MGT, MKT, or QM.*** Complete 6 hours of Foreign Language through the 212 level -

Free Electives (17 hrs)

39 Hours of 300/400 level courses
NOTES:

- *Satisfiesbothageneraleducationandamajorrequirementfor a total of 3 hours in one area only.
- **COOP 091 may be used to satisfy BUS 398, but no credit hours are earned.
. ***Only one independent study or special topics course will be counted in the major. Additional independent study or special topics course hours will count as free electives.
- Enrollmentinupperlevelbusinessschoolcoursesoutsideofthe business administration core requires a grade of C - or better in their prerequisites.
- Amaximumoffourbusinesscorecoursesandtwomajorcourses may be completed online.
- Transfer credit not accepted for any business school course (departmentACBUcourse) previouslyfailedorwithdrawnfrom at UE. Appeals to this policy may be made to the Schroeder School Academic Standards Committee.

This checklist is informational only. The University reserves the right to modify regulations and curriculum at any time.
Please see the automated degree audit on Student Planning for the most up-to-date program information.

## Bachelor of Science in

## BUSINESS ADMINISTRATION: LOGISTICS AND SUPPLY CHAIN MANAGEMENT

2019-2020 | 124 Hours Required
Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus (or MATH 221)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 101: Principles of Macroeconomics*
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MGT 497: Global Strategic Management (Minimum grade C-)

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (60 hours)
Business Administration Core
ECON 101: Principles of Macroeconomics (3 hrs)*
ECON 102: Principles of Microeconomics (3 hrs)
ID 150: The American Corporation (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
QM 227: Introduction to Statistics (3 hrs)
ACCT 210: Introduction to Financial Accounting (3 hrs)

ACCT 211: Introduction to Managerial Accounting (3 hrs)
LAW 201: Legal Environment of Business (3 hrs)
EXED 090: Building a Professional Image (0 hrs)
BUS 398: Internship in Business (3 hrs)**
FIN 361: Fundamentals of Finance (3 hrs)
MGT 310: Production/Operations Management (3 hrs)
MGT 311: Management Information Systems (3 hrs)
MGT 331: International Business Strategy (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
BUS 400: ACES Passport Program (0 hrs)
Logistics/SupplyChainManagementRequirements(Doublecounting ofcoursesacrossmajorsisnotpermitted.Nohoursofinternshipapply.Minimum
2.5 GPA required.)

LSCM 315/MGT 455: Intro to LSCM (3 hrs)
LSCM 320: Advanced Logistics Management (3 hrs)
LSCM 330: SCM Solutions with SAP (3 hrs)

Two courses from:
LSCM 360: Global Logistics \& SCM (3 hrs)
LSCM 370: E-Logistics (3 hrs)
LSCM 390: Contemporary Supply Chain Issues (3 hrs)
One course from:
LSCM 350: Humanitarian Logistics (3 hrs)
LSCM 380: Special Topics in SCM (3 hrs)
MGT 392: Managing Global Relationships (3 hrs)
MGT 475: Competitive Dynamics (3 hrs)

Free Electives (23 hrs)

39 Hours of 300/400 level courses
NOTES:

- *Satisfiesbothageneraleducationandamajorrequirementfor a total of 3 hours in one area only.
- **COOP 091 can be used to satisfy BUS 398, but no credit hours are earned.
- Enrollmentinupperlevelbusinessschoolcoursesoutsideofthe business administration core requires a grade of C - or better in their prerequisites.
- Amaximumoffourbusinesscorecoursesandtwomajorcourses may be completed online.
- Transfer credit not accepted for any business school course (departmentACBUcourse) previouslyfailedorwithdrawnfrom at UE. Appeals to this policy may be made to the Schroeder School Academic Standards Committee.

This checklist is informational only. The University reserves the right to modify regulations and curriculum at any time. Please see the automated degree audit on Student Planning for the most up-to-date program information.

## Bachelor of Science in

## BUSINESS ADMINISTRATION: MANAGEMENT

2019-2020 | 124 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking - FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

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Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus (or MATH 221)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 101: Principles of Macroeconomics*
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MGT 497: Global Strategic Management (Minimum grade C-)

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (60 hours)
Business Administration Core
ECON 101: Principles of Macroeconomics (3 hrs)*
ECON 102: Principles of Microeconomics (3 hrs)
ID 150: The American Corporation (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
QM 227: Introduction to Statistics (3 hrs)
ACCT 210: Introduction to Financial Accounting (3 hrs)
ACCT 211: Introduction to Managerial Accounting (3 hrs)

LAW 201: Legal Environment of Business (3 hrs)
EXED 090: Building a Professional Image (0 hrs)
BUS 398: Internship in Business ( 3 hrs )**
FIN 361: Fundamentals of Finance (3 hrs)
MGT 310: Production/Operations Management (3 hrs)
MGT 311: Management Information Systems (3 hrs)
MGT 331: International Business Strategy (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
BUS 400: ACES Passport Program (0 hrs)
ManagementRequirements(Doublecountingofcoursesacrossmajorsisnot permitted. No hours of internship apply. Minimum 2.5 GPA required.)
Complete 6 courses selected from the following:
MGT 306: Human Resources (3 hrs)
MGT 380: Special Topics in Management (3 hrs)
MGT 392: Managing Global Relationships (3 hrs)
MGT 395: Independent Study (1-3 hrs) ***
MGT 402: Compensation and Benefits (3 hrs)
MGT 412: Leadership (3 hrs)
MGT 430: Decision Making (3 hrs)
MGT 455/LSCM 315: Intro to Logistics/Supply Chain Mgt (3 hrs)
MGT 475: Competitive Dynamics (3 hrs)
--May substitute two 300/400 level courses (6 hours) with a prefix of ACCT, BUS, ECON, FIN, LAW, LCSM, MKT, or QM.

Free Electives (23 hrs)

39 Hours of 300/400 level courses
NOTES:

- *Satisfiesbothageneraleducationandamajorrequirementfor a total of 3 hours in one area only.
- **COOP 091 may be used to satisfy BUS 398, but no credit hours are earned.
-***Only one independent study or special topics course will be counted in the major. Additional independent study or special topics course hours will count as free electives.
- Enrollmentinupperlevelbusinessschoolcoursesoutsideofthe business administration core requires a grade of C- or better in their prerequisites.
- Amaximumoffourbusinesscorecoursesandtwomajorcourses may be completed online.
- Transfer credit not accepted for any business school course (departmentACBUcourse) previouslyfailedorwithdrawnfrom at UE. Appeals to this policy may be made to the Schroeder School Academic Standards Committee.

This checklist is informational only. The University reserves the right to modify regulations and curriculum at any time.
Please see the automated degree audit on Student Planning for the most up-to-date program information.

## Bachelor of Science in

## BUSINESS ADMINISTRATION: MARKETING

2019-2020 | 124 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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.
Outcome 7: (3 hrs) Quantitative Literacy
n MATH 134: Survey of Calculus (or MATH 221)
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy -

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 101: Principles of Macroeconomics*
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- MGT 497: Global Strategic Management (Minimum grade C-)

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (60 hours)

Business Administration Core
ECON 101: Principles of Macroeconomics (3 hrs)*
ECON 102: Principles of Microeconomics (3 hrs)
ID 150: The American Corporation (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
QM 227: Introduction to Statistics (3 hrs)
ACCT 210: Introduction to Financial Accounting (3 hrs)
ACCT 211: Introduction to Managerial Accounting (3 hrs)

LAW 201: Legal Environment of Business (3 hrs)
EXED 090: Building a Professional Image (0 hrs)
BUS 398: Internship in Business ( 3 hrs )**
FIN 361: Fundamentals of Finance (3 hrs)
MGT 310: Production/Operations Management (3 hrs)
MGT 311: Management Information Systems (3 hrs)
MGT 331: International Business Strategy (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
BUS 400: ACES Passport Program (0 hrs)
MarketingRequirements(Doublecountingofcoursesacrossmajorsisnotpermitted. No hours of internship apply. Minimum 2.5 GPA required.)
MKT 330: Consumer Behavior (3 hrs)
MKT 492: Strategic Marketing Management (3 hrs)
Complete 4 or more courses selected from the following:
MKT 373: Personal Selling (3 hrs)
MKT 380: Special Topics in Marketing (3 hrs)***
MKT 385: Digital Marketing (3 hrs)
MKT 395: Independent Study (3 hrs) ***
MKT 477: International Marketing (3 hrs)
MKT 490: Marketing Research (3 hrs)
--May substitute two 300/400 level courses (6 hours) with a prefix of ACCT, BUS, ECON, FIN, LAW, LSCM, MGT, or QM.

Free Electives (23 hrs)

## 39 Hours of 300/400 level courses

NOTES:

- *Satisfiesbothageneraleducationandamajorrequirementfor a total of 3 hours in one area only.
- **COOP 091 may be used to satisfy BUS 398, but no credit hours are earned.
- ***Only one independentstudy orspecialtopics course will be counted inthemajor.Additionalindependentstudyor special topics course hours will count as free electives.
- Enrollmentinupperlevelbusinessschoolcoursesoutsideofthe business administration core requires a grade ofC-orbetter in their prerequisites.
- A maximum of four business core courses and two major courses may be completed online.
- Transfer credit not accepted for any business school course (department ACBU course) previously failed or withdrawn from at UE. Appeals to this policy may be made to the Schroeder School Academic Standards Committee.


## Economics

Faculty: Bayar, Kerr, Murphy

## Bachelor of Science with a Major in Economics with

a specialization in<br>Business Administration or Math

Economicscombinesthebestinliberalartseducationtopreparestudentsforcareersinindustry, commerce,orpublicservice.Studentscanmajorineconomics by completingaBachelorofScience degree. A minor in economics is also available.

The Bachelor of Science degree requires a supporting area of study in addition to the economics core. This degree provides a bridge between the liberal arts and sciences and a variety of attractive professional careers. A major in economics combines the best in liberal arts and scienceseducation withtheexpertiseandtrainingnecessaryforsuccessfulcareersinallfields of industry,commerce,orpublicservice.Economistsoccupypositionsofleadershipineverysector of American industry. An economics major provides preparation for careers in state, local, or federalgovernment.Inaddition, adegreeineconomicsisanexcellentbackgroundforgraduate school in business administration, health care administration, law, or public administration.

## Requirements for Degree Program

- Minimum Grade Policy: Students are required to (1) earn a grade of C- or better in the prerequisitesforanyupper-levelSchroederSchoolcoursesoutsideofthebusinesscore;(2) earn a grade of C- or better in ECON 497.
- Course Level Policy: Normally, students will not enroll in 200-level business courses before the third semester. After completion of the third semester, students may enroll in FIN 361, MGT 310, MGT 311, MGT 377, or MKT 325 if prerequisites are satisfied. After completion of the fourth semester, students may enroll in other 300-and 400-level businesscoursesforwhich prerequisiteshavebeensatisfied.Exceptionsthatpermitearlier enrollments include but are not limited to the following:
- Students with formal plans to study at Harlaxton or in some other program of study abroad
- Students who wish to avail themselves of opportunities to take 300 - and 400 -level courses that are offered only on an alternate year basis and for which the alternate year scheduling cycle is stated with the catalog course description
- Students with exceptional preparation through advanced placement or credit by exam that warrants early enrollment
- Students who require preparation specific to the requirements of planned internships
- Minimum GPA requirement: Minimum 2.5 gpa required in each major area of study. Students must also satisfy the university's graduation requirement of 2.0 gpa for total program of study.
- On-line Policy:A maximum of six courses in the major requirements and supporting area combined may be completed online.
- Transfer Credit Policy:Transfer credit not accepted for any business school course previouslyfailedorwithdrawnfromatUE.AppealstothispolicymaybemadetotheSchroeder School Academic Standards Committee.
- Accreditation rules for the Schroeder Family School of Business Administration stipulate for this degree that a maximum of ten courses with the prefix of ACCT, BUS, FIN, LSCM, MGT, or MKT can apply towards graduation requirements.
- Double-counting of courses in the business core or across majors is not permitted.
- Fortransferstudents, at least 50 percent ofthebusiness credithours requiredforadegree from the Schroeder Family School of Business Administration must be earned at the University of Evansville.
- It is recommendedthat nomorethan 50 percent ofabusiness student'stotal credithours (excluding Economics 101, 102 and Quantitative Methods 160, 227) be taken in the Schroeder Family School of Business.
- Students studying outside the Schroeder Family School of Business Administration and planningtoearnmorethan 25 percentoftheirworkinbusinessandeconomics(excluding Economics 101, 102 and Quantitative Methods 160,227) must earn a Bachelor of Science in Accounting or a Bachelor of Science in Business Administration.
Economics Minor (18 hours)
Economics 101, 102, 345, 346; two 300- or 400-level economics electives. This excludes internships and independent study.


## Bachelor of Science

## ECONOMICS

2019-2020 | 124 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134 or 221 as supporting area requires

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
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Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 101: Principles of Macroeconomics*
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Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing (Minimum grade of C-)

- ECON 497: Research Seminar

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (48 hours)
(Doublecountingofcoursesacrossmajorsisnotpermitted.Nohoursofinternship apply. Minimum 2.5 GPA required.)
ECON 101: Principles of Macroeconomics (3 hrs)*
ECON 102: Principles of Microeconomics (3 hrs)
ECON 300: Regression Analysis (3 hrs)
ECON 345: Intermediate Microeconomics (3 hrs)
ECON 346: Intermediate Macroeconomics (3 hrs)
ECON 398: Internship in Economics (3 hrs)
ECON 425: International Trade (3 hrs)
EXED 090: Building a Professional Image (0 hrs)

BUS 400: ACES Passport Program (0 hrs)
QM 227: Introduction to Statistics (3 hrs)
MATH 134 or 221 as supporting area requires (3-4 hrs)
Threeupperdivisioneconomicselectivecourses(maysubstitutetwo 300/400 level FIN or QM courses).
-

Supporting Areas - Choose one:
Business Administration:
ACCT 210: Introduction to Financial Accounting (3 hrs)
FIN 361: Fundamentals of Finance (3 hrs)
MGT 331: International Business Strategy (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
Mathematics:**
MATH 221: Calculus I (4 hrs)
MATH 222: Calculus II (4 hrs)
MATH 365: Probability (3 hrs)
MATH 466: Mathematical Statistics (3 hrs)
Complete 6 hours in MATH above the 222 level ( 6 hrs )
Other Areas:
Economics majors are invited to consultwiththeirfacultyadvisorsin designing other supporting areas. Examples might include political science, foreign language, or international studies. Students must obtain approval for the self-designed area prior to the beginning of the senior year.

Free Electives ( 35 hours)
39 Hours of 300/400 level courses
NOTES:

- *Satisfiesbothageneraleducationandamajorrequirementfor a total of 3 hours in one area only.
- **Studentswhoanticipatepursuinggraduatestudiesineconomics are advised to include MATH 341: Linear Algebra among their mathematics electives.
- Accreditation rulesfortheSchroederFamilySchool ofBusiness Administration stipulateforthis degreethat a maximum often courses with the prefix of ACCT, BUS, FIN, LSCM, MGT, or MKT can apply towards graduation requirements.
- A maximum of six courses in the major requirements and supporting area combined may be completed online.
- Transfer credit not accepted for any business school course (departmentACBUcourse) previouslyfailedorwithdrawnfrom at UE. Appeals to this policy may be made to the Schroeder School Academic Standards Committee.
- Enrollmentinupperlevelbusinessschoolcoursesoutsideofthe business administration core requires a grade of C - or better in their prerequisites.


## College of Education and Health Sciences

## Mary P. Kessler, Dean

The College of Education and Health Sciences is composed of the School ofEducation, the Department ofPhysical Therapy, the Department of Physician Assistant Science, the School of Health Sciences, and the Dunigan Family School of Nursing. Through the School of Education, incooperationwithappropriatedepartmentsintheartsand sciences,studentscanearnabaccalaureatedegreethatpreparesthemfor teacherlicensureinawide variety ofareas including music, art,theatre, foreign language, history, biology, chemistry, physics, mathematics, English/languagearts,teachingEnglishasasecondlanguage,special education, and elementary education.

Thecollegeoffersanarray of programsinthehealthsciences,some of which can be combined to provide multiple credentials. Baccalaureatedegrees areofferedinthe professional areas of athletic training, clinicallaboratory science, exercise science, health services administration, nursing, and public health. Physical therapy majors earn an entry-leveldoctoral degree in physical therapy.Master's degrees are availableinathletictraining,healthservicesadministration, physician assistant science and public health.

All degree programs in teacher education are fully accredited by the Indiana Department of Education and the Council for Accreditation of Educator Preparation. The nursing program is accredited by the Accreditation Commission for Education In Nursing Inc. and the Indiana State Board of Nursing. Physical therapy programs are accredited by the Commission on Accreditation in Physical Therapy Education.Thepublichealthprogramisanapplicantforaccreditation by the Council on Education for Public Health. The athletic training program is accredited by the Commission on Accreditation of Athletic Training Education. The physician assistant program has been grantedAccreditation-ProvisionalstatusbyTheAccreditationReview Commission on Education for the Physician Assistant.

## iBACE: Integrating Business and Career

 EducationThe iBACE program is designed to provide students in the William L. Ridgway College of Arts and Sciences and the College of Education and HealthSciences with educational and hands-on business experiencesthatwillimprovetheirmarketabilityand careersuccess. The program exposes students to business skills that they can apply in the workplace and builds upon foundational knowledge in their educationaldisciplinesbyaddingthosemarketing,management,and finance skills essential for careers in a variety of fields. This program isdesignedtopreparestudentsforcurrentandfuturebusinesstrends in the professional workplace.

Course Work
The iBACE program contains three areas: coursework, a practical work experience, and a seminar for students seeking an internship. The program requiresninecredithours ofcourseworkprovidingthree building blocks of business training: Accounting 210, Marketing 325, andManagement 377. Studentsmustbeatleastsophomorestotakethe accounting courseandjuniorstoenrollinthemarketing andmanagement courses. iBACE students are also strongly encouraged to add at leastonecoursefrom thoseofferedinHealthServices Administration.
Professional Preparation
Students must enroll in EXED 090, Building a Professional Image, prior to completion of their internship. This is a 7 week, 0 or 1 credit course offeredthrough CareerServicesforstudents seeking aninternshiporco-opprogram. This seminarcoursecoversjobinterviewingskills,résumépreparation,currentlyavailableinternshipsand details of program administration.
Internship
In addition to any internship, practicum, or clinical experiences iBACE students have within their health sciences major, iBACE students will complete an additional internship that focuses on business aspects of health care or health sciences. The business courses should becompleted priortothe internshipsothatbusiness principlescanbe applied to the professional experience. An internshipinthe student's major discipline is preferred.

## Application

Interested health sciences students should complete an iBACE application form to enroll in the program. The enrollment form is available online through the College of Education and Health Scienceswebpage.Completedformsaretobesubmittedtothestudent's academic advisor and the Dean of the College of Education and Health Sciences.

## Education

Faculty: Bellamy, Hale, Iber, Jones, Lombardo-Graves, McBride, Nayden, Gieselman (Chair)

The future of our nation and our culture rests with children. Teaching, therefore, is a moral act.Itismoral because, inamacrosense,studentachievementandsuccessfulschoolexperiences arerelatedeconomicallyandethnicallytotheimprovementofsocialandculturalconditions.Welltaughtstudentsgrowtobecomeadultswhoareabletoparticipatefullyinourdemocratic, pluralistic society.Inamicrosense,teachingismoralbecausestudents' individuallivesareimprovedas theygrowandlearn.Teachersmust,therefore,valueandbecommittedtoeducatingandworking withallchildren,regardlessofbackgroundorethnicity-adifficultandchallengingtask,especially as the American culture becomes increasingly diverse.

Teaching is alsoa complexact. Teachersmustbehighlyskilledatworking with studentswho haveindividualneedsandabilities;they mustbeskilledatcollaborating andworking withothers in the educational community; they must know their respective disciplines and content areas well (to teach something well, teachers must understand it well); they must be able to analyze and reflect on nearly every action taken in a classroom; and they must work toward continual improvementandlearning.Teachersmustalsoberesilient;theworkofteaching canbechallenging and difficult, so being flexible and knowledgeable is important.

TheUniversity ofEvansville'steachereducation programs arefirmly based ontheseideas as the conceptual framework around which its programs, courses, and activities are designed.

The Interstate Teacher AssessmentandSupportConsortium (InTASC) principles,standards, and competencies areembeddedintheconceptual frameworkand havebeenestablishedand adopted by both the University and the state of Indiana. These comprehensive standards and competencies are also embedded in the course work and field placements that our students completewhileinteachereducation programs. Teachercandidatesarerequiredtosuccessfully demonstratenotonlywide-rangingteachingskillsbutalsocertainattitudesanddispositions.In addition, the State of Indiana revisednewlicensure requirements in 2015.Standardsforteacher preparationhavebeendevelopedtoaligntotheRevisiontoEducatorPreparationandAccountability (REPA 3) requirements. These principles and standards provide the basic framework for the requirements that all teacher education students must meet prior to graduation.

The University of Evansville, School of Education is accredited by theCouncil forthe Accreditation ofEducatorPreparation.Each programis recognized by the IndianaDepartmentofEducation and the State Board of Education. Special Professional Association recognition has also beengrantedbytheAssociationforChildhoodEducationInternational,CouncilforExceptional Children, and the National Council for Teachers of English.

## Teacher Education

The School of Education offers undergraduate education programs leading toa BachelorofScienceoraBachelorofArts degree in manyteachingareas andteacherlicensurewithmajorsinelementary education, secondaryeducation, multi-grade(P-12)educationintheatre,visualarts,andmusic.Allelementarymajorsmustalsocomplete a minor inalicensure area; the most common minorsforelementary majorsareTeachingEnglishasaSecondLanguage,Reading, andany one of several middle grades content minors. Other minors are also available and may be selected with advisor and School of Education approval. Students seeking licensing in secondary education (5th gradethrough 12thgrade)completeacorepedagogysequencewithin the School of Education.

## License Addition for Special Education

The University of Evansville School of Education provides studentstheopportunitytocompleteadditionalcourseworkandaddthe intenseinterventionand/ormildinterventionlicensetotheirteaching major.Successfulcompletion ofcourseworkallowsgraduatestoserve individuals with mild and/or intense disabilities.

Inadditiontoteachingpositions,graduatesmayfindemployment in clinics, agencies and centers devoted to the care and education of persons with disabilities.

## General Requirements

## Advising

AlleducationstudentshaveaSchool ofEducationfacultyadvisor. Studentspursuingateachinglicenseinseniorhigh,juniorhigh,mid-dleschool,ormulti-gradeeducationarealsoassignedanadvisorfrom theareaofthecontentteachingmajor.Studentsmustobtainapproval fromtheiradvisorpriortoregistrationeach semester.Certaineducationcoursesmaynotberepeated withoutapprovalfromthefaculty of the School of Education.

## Admission to Teacher Education

All students seeking teaching licenses typically apply for admission to teacher education during their sophomore year. Candidates cannot enroll in internships until they are admitted. Application forms are available on Acelink. Application forms are submitted through the LiveText Data Management System and review for admission will be facilitated through enrollment in Education 300: AdmissiontoTeacherEducation (0credithours).Admissiontoteacher education is granted when the following requirements are met.

- Grade of C or better in Education 100, 200, or 150 and 320
- Overall GPA of 2.80 or better
- Passingscoresonthereading,writing,andmathematicssections of the Basic Skills Assessment test (Indiana uses the CASA Basic Skills Assessment but will accept specified ACT or SAT benchmarkscores.) Thistestmustbecompleted during the freshman year or prior to completion of Education 100 or Education 150.
- Submission and approval of the Professional Education Portfolio on LiveText
- Satisfactory interview with Admission to Teacher Education Committee
- Approval by the School of Education faculty

Note: ACT score of 24 or above, GRE scores of 1100 will qualify studentsforwaiverofBasicSkillsAssessment.SeeSchool ofEducation Office for SAT benchmark.

## Performance Expectations and Standards

Ourteachereducation programisextensivelyclinical-based.Success in many of the courses is directly related to the degree to which a student's performance meets the expectations established by the School of Education and the local school district partners. The significanceofsuccessfulperformanceduringthesefieldexperiencesis vitalbecausethestudents'successistieddirectlytochildren'slearning andacademicachievement.Someclinicalcoursesmaynotberepeated without prior approval of the School of Education faculty.

## Student Teaching

Students should consult with their advisors concerning the submission of an application for student teaching. Application forms are available on AceLink in the Education area, and on the School ofEducation website. Thecompletedformshould be submittedone year prior to the student teaching year, typically during the fall semester of the junior year. Eligibility requirements are:

- Admitted to teacher education
- GradeofCorbetterinalleducationcourses(Allcourses required for any licensure program area)
- GPA of at least 3.00 in all education courses
- GPA of at least 3.00 overall
- GPA of at least 3.00 in the courses for the teaching major for secondary and multi-grade education students
- GPA of at least 2.75 in the courses for teaching minors
- Students cannot begin their school placements until they have been officially admitted to student teaching.

Bachelor of Science in Elementary Education

Bachelor of Science in Elementary Education/ Accelerated Second Degree

Bachelor of Science in Educational Studies

The Elementary Education program leads to an Indiana initial practitioner license to teach all subjects in grades K-6. An Indiana teaching license qualifies a graduate to teach in most of the 50 states, but students should obtain the Indiana licensure before applying for a license in another state.

To ensure consistency with Indiana teacher licensure regulations, some of the following licenseareas,curricula, andcoursesmayberevisedorreorganized priortothebeginning ofeach academic year. Students will be assisted by faculty advisors to blend current and new requirements to obtain teacher licensure.

This program provides students early and continuous clinical experiences in local school systemclassrooms.Educationcourses with practicumandinternshipcomponentsincludeopportunities for classroom observation and apprentice teaching. During the senior year a student teaching placement with a master teacher is the final clinical experience.

Elementaryeducationstudentsmustcompleteaminorwithadditionalcoursesinanapproved contentareatoextendtheteachingcoverageofthebasicelementaryeducationlicense.Completing the minor in Teaching English as a Second Language (TESL) will provide licensure for teaching English Learners with appropriate state licensing tests. Other available minors include world languages, English language arts, mathematics, reading, science, and social studies, TESL, music, reading,visualarts.Whencombinedwiththeelementaryeducationmajor,successfulcompletion of this additional teaching minor will qualify the student for an additional Indiana teaching license.

## Accelerated Second Degree

The Accelerated Second Degree program allows individuals who have completed a college degreetoparticipateinanaccelerated programthatallowsthemtoearnanelementaryeducation teaching license.

## Bachelor of Science

## ELEMENTARY EDUCATION

2019-2020 | 122 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

- HIST 141 or 142

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 101: Mathematical Ideas

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
.
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology
- COMM 380: Intercultural Communication

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- EDUC 490: Schools in a Changing Society

Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

Major Requirements (73 hours)
MATH 202: Mathematics for Elementary Teachers (3 hrs)
PSYC 226: Child \& Adolescent Psychology (3 hrs)
HE 160: First Aid with CPR (2 hrs)
Complete one course from:
ES 103: Fundamentals of Environmental Science (3 hrs)
GEOG 120: World Regional Geography (3 hrs)
GEOG 230: Physical Geography (4 hrs)
Professional Education Requirements
EDUC 100: History and Foundation of American Education (3 hrs)
EDUC 200: Intro to Diversity in Schools, Teachers, Learners (3 hrs)
EDUC 235: Mathematics for Primary School Children (2 hrs)
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 321: Teaching Social Studies (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs) EDUC 323: Teaching Science, Conservation, and Ecology (3 hrs) EDUC 324: Principles and Practices in Mathematics (3 hrs) EDUC 330: Literature for the Elem./Adolescent Child (3 hrs) EDUC 345: Designing Curriculum for Kindergarten Education (3 hrs) EDUC 385: Multicultural Understanding (3 hrs)
EDUC 403: Classroom Management Tech Elementary Teacher (1 hr) EDUC 418: Practicum: Implementing Lang Arts Curriculum (4 hrs) EDUC 419: Practicum: Implementing Social Studies/Sci Curr (4 hrs) EDUC 422: Teaching Reading \& Language Arts Elem School (4 hrs) EDUC 432: Supervised Teaching in Elementary School (12 hrs) EDUC 435: Supervised Teaching Seminar (1 hr)
Complete one course from:
EDUC 421: Preschool and Beginning Reading Skills (3 hrs)
EDUC 427: Corrective Reading (3 hrs)

39 hours of 300/400 level courses

Elementary Education Specialization
All students must complete a specialization from one of the following: Science, Social Studies, Language Arts, Mathematics, Reading, or Teaching English as a Second Language.
*Students seeking middle school licensure must select a qualifying specialization noted by an asterix below.

Science*
BIOL 107: General Biology (4 hrs)
CHEM 108: Elementary Chemistry (4 hrs)
GEOG 230: Physical Geography (4 hrs)
PHYS 121: Algebra Physics I (4 hrs)
EDUC 443: Curriculum \& Learning - Middle School (3 hrs)
Complete one course from:
ES 103: Fundamentals of Environmental Science (3 hrs)
ASTR 101: Descriptive Astronomy (3 hrs)
BIOL 214: Field Zoology (3 hrs)
BIOL 215: Field Botany (3 hrs)
Other science course may be approved by advisor
Social Studies*
EDUC 443: Curriculum \& Learning - Middle School (3 hrs)
Complete two courses from:
HIST 141: American History to 1865 (3 hrs)
HIST 142: American History since 1865 (3 hrs)
HIST 111: World History to 1500 (3 hrs)
HIST 112: World History since 1500 (3 hrs)
Complete one course from:
PSCI 143: American National Government and Politics (3 hrs)
PSCI 160: Intro to International Relations (3 hrs)
Complete one course from:
GEOG 120: World Regional Geography (3 hrs)
GEOG 240: Cultural Geography (3 hrs)
Complete three hours from: ECON, PSYC, OR SOC

Language Arts*
EDUC 422: Teaching Reading \& Lang Arts Elementary School (4 hrs)
EDUC 443: Curriculum \& Learning - Middle School (3 hrs)
EDUC 428: Reading in the Content Areas (3 hrs)
Complete one course from:
ENGL 122: Modern World Literatures (3 hrs)
ENGL 223: World Classics (3 hrs)
ENGL 352: The Young Adult Novel (3 hrs)
Complete one course from:
ENGL 231: Masterpieces of British Literature I (3 hrs)
ENGL 232: Masterpieces of British Literature II (3 hrs)
ENGL 241: Major American Writers I (3 hrs)
ENGL 242: Major American Writers II (3 hrs)
Complete one course from:
WRTG 202: Survey of English Language (3 hrs)
WRTG 204: Copy Editing (3 hrs)
WRTG 205: Intro to Creative Writing (3 hrs)
WRTG 206: Intro to Poetry Writing (3 hrs)
WRTG 207: Intro to Short Story Writing (3 hrs)
WRTG 3XX: 3 hrs of 300-level writing ( 3 hrs )

Complete eighteen hours from:
EDUC 443: Curriculum \& Learning - Junior High/Middle School
(3 hrs)
MATH 101: Mathematical Ideas (3 hrs)
MATH 105: College Algebra (3 hrs)
MATH 202: Mathematics for Elementary Teachers (3 hrs)
MATH 221: Calculus I (4 hrs)
MATH 222: Calculus I (4 hrs)
MATH 355: Foundations of Geometry (3 hrs)
Reading
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 330: Literature for the Elem./Adolescent Child (3 hrs)
EDUC 421: Preschool and Beginning Reading Skills (3 hrs)
EDUC 427: Corrective Reading (3 hrs)
EDUC 428: Reading in the Content Areas (3 hrs)
Complete one course from:
TESL 200: Second Language Acquisition (3 hrs)
TESL 325: Developmental Linguistics (2 hrs)
EDUC 264: Assessment, Evaluation, and Remediation of Students
with Special Needs (3 hrs)
ENGL 352: Young Adult Novel (3 hrs)
Teaching English As a Second Language (TESL)
COMM 380: Intercultural Communication (3 hrs)
TESL 200: Second Language Acquisition (3 hrs)
TESL 301: English Teaching Grammar ESL/EFL (2 hrs)
TESL 302: Assessment in ESL/EFL (2 hrs)
TESL 325: Developmental Linguistics (2 hrs)
TESL 326: Principles and Methods in TESL (2 credits)
TESL 328: Foundations of Dual Language Instruction History (2
hrs)
TESL 417: Internship English as a New Language (3 hrs)
Note: Students may substitute TESL 491 International Clinical
Experience in TESL (3 hrs)
TESL 433: Supervised Teaching \& Observation in ESL (6 hrs)
Note: Education majors may substitute EDUC 432 (12 hrs)
Foreign Language
211,212 and 18 hours at the 300 or 400 level
Music
MUS 140: Fundamentals of Diatonic Harmony (5 hrs) or MUS 141:
Diatonic Harmony (3 hrs)
MUS 142: Chromatic Harmony (3 hrs)
MUS 270: Teaching Music in the Elementary School (3 hrs)
Complete three hours from applied music/music ensembles
MUS 241: Introduction to Form (3 hrs)
MUS 242: Post-Tonal Theory (3 hrs)
MUS 355: History of Music I (3 hrs)
MUS 356: History of Music II (3 hrs)
MUS 357: Topics Music History \& Culture
Complete six hours from applied piano or voice
Visual Arts
ART 210: Design (3 hrs)
ART 213: Computer Graphics (3 hrs)

This checklist is informational only. The University reserves the right to modify regulations and curriculum at any time. Please see the automated degree audit on Student Planning for the most up-to-date program information.

ART 220: Drawing (3 hrs) or ART 221 Drawing (3 hrs)
ART 325: Life Drawing (2 hrs)
ARTH 208: Survey of Art History I (3 hrs) or ART 209: Survey of Art History II (3 hrs)
Complete one course from:
ART 330: Printmaking (3 hrs)
ART 340: Painting (3 hrs)
ART 345: Watercolor (3 hrs)

## Bachelor of Science

## ELEMENTARY EDUCATION ACCELERATED SECOND DEGREE

2019-2020 | 48 Hours Required
Major Requirements (48 hours)
MATH 202: Mathematics for Elementary Teachers (3 hrs)
PSYC 226: Child \& Adolescent Psychology (3 hrs)
Professional Education Requirements
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 321: Teaching Social Studies (3 hrs)
EDUC 322: Strategies for Special Needs Students K-12 (3 hrs)
EDUC 323: Teaching Science, Conservation, and Ecology (3 hrs)
EDUC 403: Classroom Management Tech for Elem Teachers (3 hrs)
EDUC 418: Practicum: Implem the Language Arts Curr (3 hrs) OR
EDUC 419: Prac: Implem Soc Studies/Science Curr (3 hrs)
EDUC 421: Preschool and Beginning Reading Skills (3 hrs)
EDUC 422: Teaching Reading/Language Arts in Elem (3 hrs)
EDUC 432: Supervised Teaching in Elementary Schools (12 hrs)
EDUC 435: Supervised Teaching Seminar (1 hrs)
EDUC 490: Schools in a Changing Society (3 hrs)
Complete one of the following options:
EDUC 235: Mathematics for Primary School Children (2 hrs) AND
EDUC 403: Classroom Mngt Tech for the Elem Teacher (1 hr) OR
EDUC 324: Principles and Practices in Math Ed (3 hrs)

## Bachelor of Science

## EDUCATIONAL STUDIES

2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
.
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
.
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- EDUC 490: Schools in a Changing Society

Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

Major Requirements (45 hours)
Professional Education Requirements
EDUC 100: History and Foundation of American Education (3 hrs)* EDUC 200: Intro to Diversity in Schools, Teachers, Learners (3 hrs)*
*EDUC 150 may be substituted for EDUC 100 \& EDUC 200
EDUC 320: Teaching Strategies in K-12 Schools (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
EDUC 322: Strategies for Special Needs Students (3 hrs) OR
EDUC 403: Classroom Mngt Tech Elem Teacher ( 1 hr )
EDUC 421: Preschool and Beginning Reading Skills (3 hrs) OR
EDUC 427: Corrective Reading (3 hrs) OR
EDUC 428: Reading in the Content Areas (3 hrs)
EDUC 422: Teaching Reading \& Language Arts Elem (4 hrs) OR TESL 325: Developmental Linguistics (2 hrs)

EDUC 435: Supervised Teaching Seminar (1 hr) EDUC 497: Supervised Teaching and Observation (6-12 hrs) PSYC 226: Child and Adolescent Psychology (3 hrs)
*All students must complete a disciplinary minor to be eligible as Educational Studies porgram completers.

Free Electives (TBD based upon concentration)

39 Hours of 300/400 level courses

## Senior High and Middle School Education (SH/MS)

Studentswishingtobecomesecondaryteachers(grades5-12)musthaveatleasttheequivalent ofamajorintheirteachingfield;inaddition,thestandardsforteachersarequitehigh andtherefore require a significant commitment of time and course work, including a number of practica andinternships.Students areassignedtwoadvisors,onefromteachereducation and onefrom his or her discipline area.

To ensure consistency with Indiana teacher licensure regulations, some of the following licenseareas,curricula, andcoursesmayberevisedorreorganized priortothebeginningofeach academic year. Students will be assisted by faculty advisors to blend current and new requirements to obtain teacher licensure.

The SH/MS education program leads to an Indiana initial practitioner license to teach in the subjectareas completed.Most subject area licenses arefor grades 5-12 and require students to completeatleastacontentteachingmajor.Studentsarealsoencouragedtocompleteoneormore supplemental or minor licensure programs.

Thisprogramprovidesstudentsearlyandcontinuouslaboratoryexperiencesinlocalschool systemclassrooms.Educationcourseswithpracticumandinternshipcomponentsincludeopportunities for classroom observation and apprentice teaching. During the senior year, a student teaching placement with a master teacher is the final clinical experience.

The curriculum of the SH/MS education program requires the completion of at least 120 semesterhours, including course work in general education, professional education, teaching majors, teaching minors, and electives.

Requirements (at least 120 hours)
EnduringFoundations General Education-41 hours, including Education 490 unlessotherwise specified in the major teaching area requirements

Additional General Requirements - 3 hours Psychology 226 (Psychology 121 is a pre-requisite)
Professional Education Requirements - 36-37 hours
Education 150, 320, 322, 363, 385, 428, 435, 436, 443; select one from Art 497 or Education 451, 453, 454, 456, 457, 459, 460, 461 (co-requisite with Education 363)

Electives - hours depend on major teaching area
Studentsshouldconsultwiththeiracademicadvisorstoselectelectivecoursesthatexpandgeneral education content and skills or that add a teaching minor for an additional licensure area.

SH/JH/MS Teaching Major Requirements
English Language Arts Major - 42 hours
Communication 210; English 120, 231, 232, 241, 242, 340, 350, 351, 353; Writing 204, 205, 308 or 312; English 122, or 223

World Languages Major (Foreign Language) - 33 hours
Students may not count 111 or 112 of their target language toward the teaching major. Proficiency must be demonstrated in a second foreign language through the 112 level. At least six semesterhoursofcourseworkmustbetakeninthetargetlanguageinanapprovedstudyabroad program. It is highly recommended that a student complete more than the six-hour minimum. Study abroad courses replace University of Evansville courses.

General education - Foreign Languages 401 required for senior seminar
French: 211, 212; choose 15 hours from French 311, 312, 314, 315, 316, 317, 318, 333; 335*, $435^{*}$; choose 12 hours from French $415^{*}, 434,438^{*}$, Foreign Languages 420

German: 211, 212; choose 15 hours from German 311, 312, 314, 321, 322, 333, 335*, 435*; choose 12 hours from German 410, 414, 433, 438*, Foreign Languages 420

Spanish: 211, 212; choose 15 hours from Spanish 311, 314, 316, 320, 321, 333, 335*, 350, $435^{*}$; Choose 12 hours from Spanish 410, 411, 433, 438*, 450, 458, Foreign Languages 420
*Course may be repeated with content change
History Education - Bachelor of Science: 45 hours, Bachelor of Arts: 51 hours (additional 6 hours of foreign language required)
History 36 hours:

HIST 290， 141 or 142,111 or 112
At least 3 courses（ 9 hours）from HIST 313，314，317，318，319，320，321，322，324，H378， H379，381， $383,418,438,450$ ，or 482 ；
At least 3 courses（ 9 hours）from：HIST 323，329，341，343，345，348，349，352，353，or 448. At least two 400 level courses other than 490 or 492 （no more than 3 hours of HIST 492） Any History class（3 hours）

Studentsalsochooseoneconcentration（9hours）．Studentschoosefromeconomics，government and citizenship，psychology，sociology，or general social studies．

Economics－ 9 hours
Economics 101，102，300／400 elective
Government and Citizenship－ 9 hours：Political Science 100 or 160；143，and one political science elective 300 or 400 level
Psychology－ 9 hours：Psychology 121 or 226，229， 259
Sociology－9hours：Sociology 105，230；one additional sociology course at the 300 or 400 level GeneralSocialStudies－9hours（Studentswillselectonecoursefromthree ofthefourdisciplines listed below）．
$\boxtimes \cdot$ Economics（101，102，300／400 elective）
区 • Political Science（100，143，160，300／400 level course）
区 • Psychology $(121,226,229,259)$
区 • Sociology（105，327，300／400 level course）
StudentscompletingamajorinhistoryeducationareeligibleforanIndiana practitionerlicensein SecondaryHistoricalPerspectives．Studentswhodesireadditionallicensingareasareencouraged to complete the Indiana Core Content Assessments in a concentration area listed above．

Mathematics Major－ 35 hours
General education－including Mathematics 221 and 495
Mathematics 222，323，341，355，365，370，420，466；one from Mathematics 425 or 445 ；at least six semester hours of computer courses specified by the Department of Mathematics

Science Major－51－55 hours，depending on licensure area
Science licensing is available in the areas of life science，chemistry，and physics．All candidates must complete the science core requirements．
Science Education Core－11－12 hours
Select three from outside the major；Astronomy 101，Biology 107，Chemistry 118，Geography 230，Physics 121

Licensure Areas
Chemistry（BA or BS in basic chemistry）－41－47 hours
CompleterequirementsfortheBachelorofArtsorBachelorofScienceinbasicchemistryinclud－ ing general education requirements that increase general education hours from 41 to 42，and 6 hours of additional foreign language if pursuing a Bachelor of Arts degree．See the＂Chemistry＂ section of the catalog under＂College of Arts and Sciences．＂

Life Science（BA or BS in applied biology）－33－40 hours
CompleterequirementsforaBachelorofArtsorBachelorofScienceinappliedbiologyincluding generaleducationrequirementsthatincreasegeneraleducationhoursfrom41 to42，and6hours ofadditionalforeignlanguageifpursuingaBachelorofArtsdegree．Seethe＂Biology＂section of the catalog under the＂College or Arts and Sciences．＂

Physics（BA in physics）－ 44 hours
Complete requirements for a Bachelor of Arts in physics，including general education require－ ments that increase general education hours from 41 to 42 ，and 6 hours of additional foreign language．See the＂Physics＂section of the catalog under the＂College or Arts and Sciences．＂

Theatre Education Major－ 43 hours
Studentsarerequired toauditionorinterviewwiththeDepartmentofTheatrefacultyforadmis－ sion into the theatre education program

General education - 41 hours, including Education 490 or Theatre 465
Major - 43 hours, Theatre 110 or 160, 111 or 171, 112 or 172, 120, 125, 130, 135, 220 or 221, 335 or 336 or 337, 481; 9 hours or theatre electives; four hours from theatre 190, 290, 390

## SH/MS Teaching Minors

While teaching minors are not required, senior high and middle schooleducationstudentsarestronglyencouragedtochooseteaching minors which complement their teaching majors.

Teaching English as a Second Language (TESL) Minor - 21-27 hours Education students who completethe Teaching English as a Second Language (TESL) minor in addition to another teacher education major are eligible for licensure to teach English Learners. TESL 491 may be substituted for TESL 417.
COMM 380; TESL 200, 301, 302, 325, 326, 328, 417 or 491. TESL 433 ( 6 hours) is optional. Students may choose to substitute EDUC 436 (12) for EDUC 433 (6 hours).

English Language Arts Minor - 24 hours
English 120, 231, 232, 241, 242; English 223; Writing 205, one 300level writing course
Foreign Language Minor - 24 hours
Students may not count 111 or 112 toward the minor. An approved study abroad program of at least six semester hours is highly recommended.StudyabroadcoursesreplaceUniversityofEvansvillecourses.
French, German, or Spanish: 211, 212, 18 hours at the 300 or 400 level

## Mathematics Minor - 24 hours

Mathematics 221, 222, 323, 341, 355, 365; QM 160 or equivalent course approved by Department of Mathematics.

## Science Minor

Forthe science minor, at leastone of the following is required. Licensure is obtained only for the one area chosen.

Chemistry - 28 hours
Chemistry 118, 240, 280, 351, 360; Mathematics 222; Physics 121 or 210

Life Science - 31 hours
Biology 107, 108, 109, 320, 331; Chemistry 108 or 118; Exercise and Sport Science 112, 113

Physics - 32 hours
Mathematics 221, 222, 323; Physics 210*, 211*, 213, 214, 312, 305
*Inspecial cases approved bythechair oftheDepartmentofPhysics, Physics 121 and 122 may be substituted for Physics 210 and 211.

Visual Arts Minor - 20 hours
Art 210, 213, 220 or 221, 325; Art 330 or 345; one from Art 350, 360, 370; Art History 208 or 209

## Multi-Grade Education Programs

ToensureconsistencywithanticipatedchangesinIndianateacher licensure regulations, some of the following license areas, curricula, and courses may be revised or reorganized prior to the beginning of each academic year. Students will be assisted by faculty advisors to blend current and new requirements to obtain the teacherlicensure they wish to achieve.

## Music Education P-12

Students completing the music education major will meet the requirements for an Indiana K-12 teaching license in either general andvocalmusicorgeneralandinstrumentalmusic.Studentsshould
see the "Department of Music" section for specific courses.

## Transition to Teaching

The Transition to Teaching program allows individuals who have completedacollegedegreeto participateinanaccelerated program thatallowsthemtoearnasecondaryeducationteachinglicense. The programisavailableformath,lifescience/biology,chemistry, physics, history, English,foreignlanguages andcultures, visual artandmusic. Much ofthe instruction in the transition to teaching program occurs in the schools through a series of internships and student teaching experiences.Beyonduniversity coursework,studentsmustalsopass statelicensingexamsandmeetthebasicskillscompetencies required by the Indiana Department of Education.

Courses in the Transition to Teaching program are typically completed in a calendar year. The required studentteaching course allows students to spend a full semester in a classroom working with a mentor teacher and university supervisor.
Professional Education Requirements - 17-18 hours
Psychology 226 Child and Adolescent Psychology (3)
Education 320 Teaching Strategies in K-12 Schools (3)
Education 363 Principles and Strategies of Teaching in Secondary Schools (3)
One teaching methods course: EDUC 451, 453, 454, 456, 461, Music 372, Music 373, (2) hours or Art 497 (3) hours: Methods of Teaching (content area) in Senior High, Junior High, Middle Schools
Education 497 Supervised Teaching and Observation in Elementary, Middle School, Junior High, and Senior High (5)
Education 435 Supervised Teaching Seminar (1)

## Teaching English as a Second Language (TESL) Minor for Non-Education Majors

The minor in Teaching English as a Second Language (TESL) preparesstudentstoteach Englishtonon-native speakers.Students will work with non-native speakers as interns under the supervision of an experienced TESL teacher. This minor is open to students in all schoolsandcollegeswithintheUniversity, howevertheywouldnotbe licensed for classroom teaching.

Non-education majors (22 hours): COMM 380; TESL 200, 301, 302, $325,326,328,417^{*}$; one 300 or 400 level communication elective.
*Students may substitute TESL 491 for TESL 417.

## School of Health Sciences

TheSchool ofHealthSciencesisdedicatedtohelpingstudentsfindwaystoimprovethequality oflifethroughavarietyofinnovativeundergraduateprograms.Toachievethisgoal,theschooloffers distinctacademicmajorsinathletictraining,appliedand pre-professionalexercisescience,clinicallaboratoryscience,healthservicesadministration,publichealth,andsportmanagement.Coursesoffered throughtheseprogramsaredesignedtopreparestudentsforsuccessfulentryintotheirchosencareer path or for admission to graduate school or professional programs.

## Bachelor of Science with a Major in Athletic Training

## Program Director: Jeff Tilly

The certified athletic trainer (ATC) is a highly educated and skilled allied health professional. Incooperation with physiciansandotheralliedhealth personnel,theATCfunctionsasanintegral memberofthehealthcareteamforthephysicallyactive.Traditionally,secondaryschools,colleges anduniversities,sportsmedicineclinics,orthopedicsurgeonoffices,industrialsettings,and professional sports teams have employed certified athletic trainers.

The athletic training major is designedforthose individuals who seekcertificationas an athletic trainer for the Board of Certification (BOC). The Commission on Accreditation of Athletic Training Education (CAATE) is the accrediting body for athletic training education programs. The University of Evansville's athletic training program is accredited by CAATE. The University of Evansville'sathletictraining programiscompetitive,andasetnumberofstudentsareallowed entry per year.

Thebachelor's degree program preparesthe athletictraining studentforchallenges that will be encounteredasanalliedhealth professional.This includestheintegration of astrong liberal arts and sciencefoundationwithproblemsolvingandclinicalskilldevelopment.Theconcurrentclinicaleducationmodelallowsthestudenttoworkunderthesupervisionofanapprovedclinicalinstructor.The majority of clinical education occurs while working with the University's NCAA Division I athletic teams.Convenientoff-campusassignmentswithclinic-andhighschool-basedathletictrainersaswell as physicians exist to ensure a well-rounded practical experience.

Many athletic training students find it advantageous to pursue additional degrees in related health care areas offered at the University of Evansville. These include the Doctor ofPhysicalTherapy, the Associate of Science in Physical Therapist Assistance, and the Master in Physician Assistant Sciencedegree.Allthreeprogramsareaccreditedbytheirrespectiveaccreditingorganizations. The University of Evansville is currently one ofonly three institutions that offer these three programsina seven statearea in the Midwest. This makes the athletic training program at the University of Evansvilleauniqueexperiencewhichenablesstudentsto individuallystructuretheirlearningtomeetthe needs of the current job market.

## Admission

Entry into the program is competitive. Admission criteria include: Completion or current enrollmentineach ofthefollowingprerequisitecourses:AthleticTraining280;ExerciseandSport Science 112, 113, 150, 244 (2 hours); Health Education 100, ; Physical Therapy 100
(Basic skill acquisition and 100 hours of clinical observation are components of Exercise and SportScience 244.The 100 hours mustbeaccumulated priorto application tothe program. Athletictrainingstudentshave20weekstoachievethesetotalswithanaverageoffivehoursperweek; eachweekshouldbedocumentedbytheirapprovedclinicalinstructor.Weeklysubmissionofthe signedhoursandajournalisneededtoapplytotheprogram.)(Noteapplicationdeadlinebelow.)

- A grade of $C$ or better in the prerequisite courses
- Minimum cumulative grade point average of 2.75
- Completion of the ATP technical standards
- Completion of a written application
- Personal interview
- Completion of AT-FYE Clinical Skills Checklist
- Completion of all required work for Exercise and Sport Science 244 (2 semesters)

Aftersubmittingallapplicationmaterial,theprospectivestudentmaybegrantedaninterview with the admission committee. An interview is required for admission into the program.

Applications are due the last Friday in January. The selection process will be completed in time for fall semester registration, and all applicants will be notified of their status at this time. Acceptanceintotheprogramisconditionalbasedonsuccessfulcompletionofthestudent'scurrent semester course work.

Directentryintothe programis availableforasmallnumber ofqualifiedincoming freshmen who have been accepted into the direct entry physical therapy program. These students must meetcertainACTandSATscorestandardsandhaveaformalinterview withthephysicaltherapy department as well as the faculty of the athletic training education program.

Admission criteria are subject to change. Applications and additional information are available from the program director.

Transfer students may be considered for admission into the program.

## Bachelor of Science

## ATHLETIC TRAINING

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
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Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (70 hours)
HE 111: Medical Terminology (1 hr)
EXSS 112: Human Anatomy and Physiology I (4 hrs)
EXSS 113: Human Anatomy and Physiology II (4 hrs)
EXSS 150: Intro to Exercise Science (2 hrs)
AT 180: Intro to Athletic Training (3 hrs)
AT 282: Basic Skills in Athletic Training (3 hrs)
AT 287: Therapeutic Modalities in Athletic Training (3 hrs)
AT 291: Clinical Education in Athletic Training (2 hrs)
AT 292: Clinical Education in Athletic Training II (2 hrs)
AT 350: Administration of Athletic Training (3 hrs)
AT 388: Evaluation of the Lower Body (3 hrs)
AT 389: Evaluation of the Upper Body (3 hrs)
AT 390: Rehabilitation of Athletic Injuries (3 hrs)
AT 391: Clinical Education in Athletic Training III (2 hrs)
AT 392: Clinical Education in Athletic Training IV ( 2 hrs )
AT 490: Pharmacology and Medical Conditions (2 hrs)
AT 491: Clinical Education in Athletic Training V (2 hrs)
AT 492: Clinical Education in Athletic Training VI (2 hrs)
EXSS 320: Nutrition, Performance \& Health (3 hrs)
EXSS 321L: Applied Human Anatomy and Physiology Lab (2 hrs)
EXSS 352: Physiology of Exercise (3 hrs)
EXSS 356: Biomechanics (3 hrs)
EXSS 388: Exercise Prescription (3 hrs)
EXSS 427: Exercise Testing and Leadership (2 hrs)
EXSS 451: Exercise/Sport Psychology (3 hrs)
Complete 2 hours of practicum.
EXSS 244: Practicum (1 hr)
Complete one course from:
HSA 405: Health Care Systems: Issues and Trends (3 hrs)
HSA 406: Jurisprudence/Ethics in Health Care (3 hrs)
Free Electives (9 hrs)

39 Hours of 300/400 level courses

## Bachelor of Science with a Major in Clinical Laboratory Science

A clinical laboratory scientist (medical laboratory scientist) is capable of performing, under the supervision of a pathologist or other qualified physician or laboratory director, the various chemical,microscopic,bacteriologic,andothermedicallaboratoryproceduresusedinthediagnosis, study, and treatment of disease.

Studentspursuingtheclinicallaboratorysciencemajorcompleteapproximately 100 semester hours at UE (six semesters of course work) and then complete 12 months of study at a hospital endorsed by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and the American Society of Clinical Pathology (ASCP) of the American Medical Association. The firstthreeyearsofstudyprovideasolidfoundationbasedonthenaturalscienceswithanemphasis onbiologyandchemistry.Thefourthyearconsistsofcombinedclassroomandlaboratorystudies thatprovideexperienceinclinicalchemistry,hematology,immunohematology(bloodbanking), microbiology,serology/immunology/virology,parasitologyandmycology,urinalysis,andinstrumentation. Completion of prerequisite courses at UE does not guarantee admission to a hospital program.Acceptanceisbasedonacademicperformance,lettersofrecommendation,motivation, aptitude, work experience, and interviews.

Somestudentscompleteafour-yearBSdegreebeforeenteringtheclinicalyearoftraining.An option for those students interested in a career in clinical laboratory science is to complete the four-year combined exercisescienceand clinicallaboratoryscience degree, priortotheclinical experience during the fifth year.

## Clinical Exercise Science Minor (24 hours)

The clinical exercise science minor prepares students for careers related to exercise in a clinical setting. The curriculum of the minor prepares students for the application of exercise and physicalactivityinthoseclinicaland pathologicalsituationswhereithasbeenshownto provide therapeutic or functional benefit.

## Bachelor of Science

## CLINICAL LABORATORY SCIENCE

2019-2020 | 135 Hours Required

Enduring Foundations General Education Requirements (42 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy

- MATH 134: Survey of Calculus

Outcome 8: (8 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- PHYS 121: Algebra Physics I (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (61 hrs)
HE 111: Medical Terminology (1 hr)
EXSS 112: Human Anatomy and Physiology I (4 hrs)
EXSS 113: Human Anatomy and Physiology II (4 hrs)
EXSS 150: Intro to Health Sciences (2 hrs)
PHYS 122: Algebra Physics II (4 hrs)
BIOL 119: Intro Biology: Molecular Perspective (4 hrs)
BIOL 120: Intro Biology: Organismal Diversity (4 hrs)
BIOL 331: Genetics (4 hrs)
BIOL 340: Cellular and Molecular Biology (4 hrs)
BIOL 430: Microbiology (4 hrs)
BIOL 434: Parasitology (4 hrs)
BIOL 442: Immunology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
CHEM 341: Organic Chemistry II (4 hrs)
CHEM 360: Quantitative Analysis (4 hrs)
CHEM 370: Biochemistry I (3 hrs)
QM 227: Introduction to Statistics (3 hrs)
Clinical (32 hrs)
EXSS 478: CLS Clinical
Creditgrantedupon successful completion oftwo semesters ofclinical experienceandasummerclinical.Prerequisite:Successfuladmission into clinical laboratory program.

39 Hours of 300/400 level course

# Bachelor of Science with a Major in Exercise Science Applied 

## Bachelor of Science with a Major in Exercise Science -Pre-professional

Theexercisesciencemajorembracesastrongsciencefoundationandfocusesonthescientific aspects ofexerciserelatedtohealthy, injured, andhigh-riskpopulationstounderstandtheconsequencesofphysicalactivity.Exercisescienceisanapplieddiscipline;therefore,thecurriculum includeslaboratoryorlaboratory-typeactivitiesinexercisephysiology,biomechanics,andexercise testing andleadership.Inaddition,University-andcommunity-based projectsareincorporated intotheacademiccurriculumtogiveexercisesciencestudentsexposuretovariouspopulations similartothosetheymayencounterintheirchosen professions.Exercisesciencecoursesareregularly taught at Harlaxton College in the summer.

Allexercisesciencemajors participate in an intensive internship programthatis requiredfor graduation. Internshipopportunities exist in cardiac rehabilitation, corporatefitness, wellness and fitness centers, strength and conditioning programs, and sport-specific conditioning programs, as well as in other areas of interest to the student. In addition, opportunities exist for students to engage in undergraduate research activities with faculty and other students.

Amajorinexercisesciencepreparesstudentsforgraduatestudyinareassuchasexercisephysiology,biomechanics,wellness,health promotion,nutrition,andexerciseandsportpsychology. Italsopreparesstudentstoentersuch professionalschoolsasphysicaltherapy,physicianassistant, ormedicalschools.Studentsarepreparedforcareersin preventativeexercise, wellnessprograms, and to work with healthy populations in maintaining healthy lifestyles.

The exercise science major has two tracks, applied and pre-professional.

## Applied Track

The applied track prepares students for leadership roles in a growing number of career opportunities dealing with human health and wellness such as exercise instruction, cardiac rehabilitation, personaltraining,strengthandconditioningspecialist,orasahealthandwellness professional.Inaddition, thisdegreepreparesstudentsforgraduatestudyinsuchareasasexercise physiology, biomechanics, or exercise and sport psychology.

## Pre-professional Track

The pre-professional track may be used as preparation for graduate study in areas such as exercisephysiology,biomechanics, wellness,health promotion, and publichealth.Theprimary emphasis of this track is, however, as a preparation for entry into such professional schools as physicaltherapy, physicianassistant,medical,and podiatryschools.Studentscanearnboththe undergraduate and Doctor of Physical Therapy degrees in six orseven years, depending on the selected pathway.

## Exercise Science Minor (21 hours)

Theminorinexercisesciencepreparesstudentsforcareersworkingwithrelativelyhealthypopulations.Thecurriculumofthisminorpreparesstudentsforcareerswith personalfitnesstraining, corporate wellness programs, or fitness centers.
Exercise and Sport Science 352, 356, 388, 415, 427, 451, 453; Public Health 195
Exercise and Sport Psychology Minor (20 hours)
Exerciseandsportpsychologyisarapidlygrowingsubdisciplineofexercisesciencethatstudiesawide arrayofcognitiveissuesrelatedtophysicalactivity.Exercisepsychologyexaminesrelationshipssuch asthementalhealthbenefitsassociatedwithregularparticipationinexerciseprogramsandfactors relatedtoexerciseadherence.Sportpsychologyisthestudy ofcognitivefactorsthatinfluencesport performancesuchasmotivation,overtrainingandstaleness,anxiety,andcoach-athleterelationships. Thecurriculumofthisminorpreparesstudentsforgraduatestudyinexerciseandsportpsychology, motorlearning, orpsychology.ThecorecurriculumofthisminorcombinesclassesfromtheSchool of Public Health and the Department of Psychology.
Exercise and Sport Science 218, 352, 451, 453; Psychology 226, 229; Neuroscience 125.
Sport Management Minor (24 hours)
Thisminorprovidesstudentswithabroadbackgroundinbusiness-relatedaspectsofsport.The minoris designedforstudentsinterestedinworking inticketsalesand promotions,advertising, athletics administration, or in sporting retail sales.
Accounting 210; Law 201; Management 377; Economics 102; Exercise and Sport Science 201, 310 350; one from Accounting 211, Finance 361, 362, Management 392,412, 430, Marketing 325, 330.

## Bachelor of Science

## EXERCISE SCIENCE - APPLIED

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 100, 107, 118
- PHYS 100 or 121

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

- HE 100: Concepts of Health and Wellness (1 hr)

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- EXSS 493: Current Issues in Exercise/Sport Science

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (71 hrs)
AT 180: Intro to Athletic Training (3 hrs)
HE 111: Medical Terminology (1 hr)
EXSS 112: Human Anatomy and Physiology I (4 hrs)
EXSS 113: Human Anatomy and Physiology II (4 hrs)
EXSS 150: Intro to Health Sciences (2 hrs)
EXSS 201: Intro to Sport Management (3 hrs)
EXSS 310: Sports Law and Ethics (3 hrs)
EXSS 320: Nutrition, Performance \& Health (3 hrs)
EXSS 350: Sport Facility and Event Management (3 hrs)
EXSS 352: Physiology of Exercise (3 hrs)
EXSS 356: Biomechanics (3 hrs)
EXSS 388: Exercise Prescription (3 hrs)
EXSS 400: Principles Theory of Strength/Conditioning (3 hrs)
EXSS 415: Exercise Physiology II (2 hrs)
EXSS 417: Advanced Exercise Science ( 3 hrs )
EXSS 427: Exercise Testing and Leadership (2 hrs)
EXSS 428: Cardiac Rehabilitation (3 hrs)
EXSS 451: Exercise/Sport Psychology (3 hrs)
EXSS 453: Motor Learning (2 hrs)
PH 190: Intro to Public Health (3 hrs)
QM 227: Introduction to Statistics (3 hrs)
BIOL 100: Fundamentals of Biology (4 hrs) OR
BIOL 107: General Biology (4 hrs)
Complete 8 hrs of Internship
EXSS 488: Internship (1-12 hrs)

Free Electives (8 hrs)

39 Hours of 300/400 level courses

Bachelor of Science

## EXERCISE SCIENCE - PRE-PROFESSIONAL

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (42 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: ( 6 hrs ) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- BIOL 107: General Biology -4 hrs (Pre-PT) OR

BIOL 119: Intro Biology: Molecular Perspective (Pre-PA)
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology (3 hrs) (Pre-PA, PT)
- SOC 105: Introduction to Sociology (3 hrs) OR

SOC 230 (Pre-Med, Pre-PA)
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

- HE 100: Concepts of Health and Wellness (1 hr)

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- EXSS 493: Current Issues in Exercise/Sport Science OR PT 451, 453, and 453

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements ( 68 hrs )
HE 111: Medical Terminology (1 hr)
EXSS 112: Human Anatomy and Physiology I (4 hrs)
EXSS 113: Human Anatomy and Physiology II (4 hrs)
EXSS 150: Intro to Health Sciences (2 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
EXSS 320: Nutrition, Performance \& Health (3 hrs)
EXSS 352: Physiology of Exercise (3 hrs)
EXSS 356: Biomechanics (3 hrs)
EXSS 388: Exercise Prescription (3 hrs)
EXSS 415: Exercise Physiology II (2 hrs)
EXSS 417: Advanced Exercise Science (3 hrs)
EXSS 427: Exercise Testing and Leadership (2 hrs)
PHYS 121: Algebra Physics I (4 hrs)
PHYS 122: Algebra Physics II (4 hrs)
QM 227: Introduction to Statistics (3 hrs)
(Students on DPT 3+3 track may complete PT 451/452)
EXSS 428: Cardiac Rehabilitation (3 hrs)
(Students on DPT 3+3 track may complete PT 422)
Complete 8 hrs of Internship
EXSS 488: Internship (1-12 hrs)
Complete 4 courses from:
AT 180: Intro to Athletic Training (3 hrs)
BIOL 110: Clinical Microbiology (3 hrs)
EXSS 201: Intro to Sport Management (3 hrs)
EXSS 310: Sports Law and Ethics (3 hrs)
EXSS 400: Principles Theory of Strength/Conditioning (3 hrs)
EXSS 451: Exercise/Sport Psychology (3 hrs)
EXSS 453: Motor Learning (2 hrs)
GT 401: Biology/Health/Aging (1.5 hrs)
HSA 405: Health Care Systems: Issues and Trends (3 hrs)
HSA 406: Jurisprudence/Ethics in Health Care (3 hrs)
HSA 414: Health Care Management Theory \& HR (3 hrs)
PH 190: Intro to Public Health (3 hrs)
PH 195: Global Health Issues (3 hrs)
PH 301: Epidemiology (3 hrs)
NEUR 125: Introduction to Neuroscience (3 hrs)
PSYC 357: Neuropsychology (3 hrs)

Free Electives (10 hrs)

39 Hours of 300/400 level courses

## NOTES:

*Pre-PA take BIOL 110, CHEM 280, and CHEM 341
*Pre-Med take BIOL 120, BIOL 331, CHEM 341, and CHEM 370

## Bachelor of Science with a Major in Health Services Administration

## Combined Bachelor and Master of Science in Health Services Administration

The University of Evansville offers both bachelor's and master's degrees in health services administration.Theprogramisstructuredsothatacombinedbachelor'sandmaster'sdegreecan beearned infiveyears. Under thisoption the student receives both the bachelor's and master's degreeatthesametime.Studentswhodonotchoosethecombined programmayearnthebachelor'sdegreeinfouryears.Thetimerequiredforthecombineddegreecanbeshortenedbytaking courseworkduringthesummer.Additionally,studentswhoalreadyholdabachelor'sdegreemay enroll in the master's program and attend on a part-time or full-time basis.

The many changes in health care over recentyears have created a need for managers who can dealwiththemultitudeofchallengesspecifictothehealthcareindustry. Healthcareadministrators are employed in a wide variety of organizations and work environments. These may include hospitals,managedcarecompanies,outpatientcarefacilities,mentalhealthfacilities,pharmaceutical companies, governmentagencies,healthinsurancecompanies,publichealthagencies,voluntary healthagencies, healthmaintenanceorganizations,andclinics. Thisundergraduatemajorprepares studentsforemployment inthefield of health care,oras preparationforgraduate orprofessional programssuchasthemaster'sdegreeinHSA program,orpost-graduateprogramsinpublichealth, physician assistant, or physical therapy.

Internships andfield placements are an important part ofeach student's exposuretovarious areas offutureemployment.Allstudents complete sixcredits of internshipduring theirjuniorand senioryear.Thestudent,theadvisor, andthe program directormutuallyagreeupontheinternship locationandcontent.Internshipsmaybecompletedduringthefall,spring,orsummersessions.Additionally, allmaster'sstudentsparticipateinuptosixcreditsoffield experience.Theseopportunities provide students with a variety of organizational experiences.

## Combined Program

Inadditiontothecourseworkrequiredforthebachelor'sdegreeprogram,studentsmustdeclare their intention to pursue the five-year combined degree no later than the beginning of theirfourth yearofstudy.Exceptionsforlateradmissiontothefive-yearprogramwillbereviewedonanindividual basis. For students pursuing the combined BS and MS program, a grade of C - or above is required in allgraduateclassesandallundergraduaterequiredclasses.Variationsincoursesequencingwilloccur during the final two years of the five-year program.

Harlaxton College in Grantham, England
The health services administration program offers a summer program at HarlaxtonCollege whichattractsstudentsfromprogramsacrosstheU.S.aswellasfromtheUniversity ofEvansville.

## Bachelor of Science

## HEALTH SERVICES ADMINISTRATION

2019-2020 | 125 Hours Required

Enduring Foundations General Education Requirements (42 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition .

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy

- MATH 105: College Algebra or higher

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- BIOL 107: General Biology -4 hrs (Pre-PT) OR BIOL 119: Intro Biology: Molecular Perspective (Pre-PA)
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
- ECON 101: Principles of Macroeconomics
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- HSA 490: Decision Making in Health Care

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements ( 60 hrs )
HE 111: Medical Terminology (1 hr)
ACCT 210: Introduction to Financial Accounting (3 hrs)
ACCT 211: Introduction to Managerial Accounting (3 hrs)
ECON 102: Principles of Microeconomics (3 hrs)
FIN 361: Fundamentals of Finance (3 hrs)
HSA 405: Health Care Systems: Issues and Trends (3 hrs)
HSA 406: Jurisprudence/Ethics in Health Care (3 hrs)
HSA 414: Health Care Management Theory \& HR (3 hrs)
HSA 420: Health Care Planning/Marketing (3 hrs)
LAW 201: Legal Environment of Business (3 hrs)
MGT 311: Management Information Systems (3 hrs)
MGT 377: Organizational Behavior (3 hrs)
MKT 325: Principles of Marketing (3 hrs)
QM 160: Introduction to Data Analytics (3 hrs)
HSA 467: Statistics Appraisal/Evaluation (3 hrs) OR
QM 227: Introduction to Statistics (3 hrs)
Complete 3 hrs from gerontology
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Complete 6 hrs of Internship
HSA 498: Internship in Health Services Administration (1-6 hrs)
Complete 8 hrs from:
BIOL 107: General Biology (4 hrs)
CHEM 118: Principles of Chemistry (4 hrs)
HE 160: First Aid with CPR (2 hrs)
HS 290: Drug and Alcohol Abuse
HSA 499: Special Topics Health Services Administration (3 hrs)
NURS 490: Seminar on Alcohol and Substance Abuse
NUTR 304: Nutrition Concepts-Controversies (3 hrs)
PH 190: Intro to Public Health (3 hrs)
PH 301: Epidemiology (3 hrs)
PHIL 317: Bioethics (3 hrs)
SOC 337: Social Aspects Health/Health Care (3 hrs)

Free Electives (23 hrs)

39 Hours of 300/400 level courses

## Bachelor and Master of Science

## HEALTH SERVICES ADMINISTRATION

2019-2020 | 149 Hours Required

Enduring Foundations General Education Requirements (41 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 105: College Algebra or higher

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
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-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- ECON 101: Principles of Macroeconomics (min. grade of C-)
- 

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- HSA 490: Decision Making in Health Care

Overlay: Writing Across the Curriculum (4 courses)
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## Bachelor of Science in Public Health Health Policy or Nutrition Emphasis

Bachelor of Science and Master of Public Health

Thisdegreeprogramtrainsstudentsinmultidisciplinaryapproachestopublichealth practice and research. The degree plans to explore both quantitative and qualitative aspects of public health at alllevels of analysis. Graduates willadvance,through selectiveemploymentorfurther education, to become the new generation of public health professionals prepared to face the emerging challenges to human health from a population perspective.

A major in public health prepares students for graduate study in areas such as health care management, wellness and health promotion, and nutrition. It also prepares students to enter professional programssuchasbusiness, physicaltherapy,andmedicalschoolalongwithseveral other programs. For graduates with the bachelor's degree who wish to enter the job market directly, there is a plethora of opportunities. Careers in public health can be found in a number ofareas in privateand publicorganizationssuchasstatewideandregional healthcareagencies, communityclinics,biomedicalcompanies,health-educationinstitutions,andnon-governmental organizations.Theundergraduatemajorpreparesstudentsforemploymentinthefieldofpublic health or for preparation in post-graduate programs or professional programs such as those in medicine, publichealth, physician assistant science, physical therapy, and more.Students may also earn both the publichealth and doctorate of physical therapy degrees in sixor seven years, depending on the selected pathway.

The public health major has two emphases areas - health policy and nutrition-to meet the academic and professional goals of students.
Health Policy Emphasis
The Health Policy emphasis prepares graduates to be decision makers, critical thinkers, and futureleaders inboththepublicand privatesectors ofthe health system. Thehealth careindustry offer students a vast array of opportunities. Such opportunities are with the state and local healthdepartments,hospitalsystems, governmentagencies,healthinsurancecompanies,research institutions, and consulting firms, to name a few.

## Nutrition Emphasis

The Nutritionemphasis prepares graduates to promote healthy eating and lifestyle choices among individuals and groups as well as those with special nutritional needs. Due to the multidisciplinary nature of Public Health, graduates can pursue diverse career paths. The Nutrition emphasispreparesgraduatesforrewardingcareersasnutritionists, wellnessexperts,foodservice managers, lifestyle counselors, weight-loss coaches as well as a number of other careers.

## Combined Program

In addition to the course work required for the bachelor's degree program, students must declare their intention to pursue the five-year combined degree no later than the beginning of theirthirdyearofstudy.Exceptionsforlateradmissiontothefive-yearprogram willbereviewed on an individual basis. For students pursuing the combined bachelor of science and master of public health program, a grade of C - or above is required in all graduate classes and all undergraduate required classes. Variations in course sequencing will occur during the final two years of the five-year program.

Public Health Minor (23 hours)
Theminor in publichealth prepares studentsforcareersthatarefocused on disease prevention andhealth promotion. The curriculum ofthisminorprepares studentsfor careers with community health centers, health agencies, and wellness programs.
Health Services Administration 405; Public Health 190, 195, 360, 401, 409, 425; Sociology 337

## Bachelor of Science

## PUBLIC HEALTH - HEALTH POLICY EMPHASIS

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology (3 hrs)
- SOC 105: Introduction to Sociology (3 hrs)

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- PH 490: Integrative Experience

Overlay: Writing Across the Curriculum (4 courses)

Major Requirements (54 hrs)
NUTR 304: Nutrition Concepts-Controversies (3 hrs)
PH 190: Intro to Public Health (3 hrs)
PH 195: Global Health Issues (3 hrs)
PH 360 Community Health and Social Justice (3 hrs)
PH 401: Epidemiology (3 hrs)
PH 409: Environmental Health (3 hrs)
PH 415: Health Behavior (3 hrs)
PH 480: Programs, Problems, and Policies in Public Health (3 hrs)
PH 425: Biostatistics (3 hrs)
Complete 3 hrs of Internship.
PH 488: Internship (1-12 hrs)
Complete 12 hrs from:
COMM 380: Intercultural Communications (3 hrs)
COMM 410: Health Communications (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
ETH 200: Social Justice Movements (3 hrs)
GT 401: Biology/Health/Aging (1.5 hrs)
GT 402: Social Aspects of Aging ( 1.5 hrs )
GWS 101: Gender and Women Studies (3 hrs)
HE 111: Medical Terminology (1 hr)
PHIL 121: Introductory Ethics (3 hrs)
PHIL 316: Environmental Ethics (3 hrs)
PSYC 229: Social Psychology (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
SOC 460: Aging and Society (3 hrs)
Health Policy Emphasis
HSA 405: Health Care Systems: Issues and Trends (3 hrs)
HSA 406: Jurisprudence/Ethics in Health Care (3 hrs)
HSA 414: Health Care Management Theory \& HR (3 hrs)
HSA 420: Health Care Planning/Marketing (3 hrs)

Free Electives (25 hrs)

39 Hours of 300/400 level courses

## Bachelor of Science

## PUBLIC HEALTH - NUTRITION EMPHASIS

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (41 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition .

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- BIOL 107: General Biology -4 hrs (Pre-PT)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology (3 hrs)
- SOC 105: Introduction to Sociology (3 hrs)

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- PH 490: Integrative Experience

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (58 hrs)
NUTR 304: Nutrition Concepts-Controversies (3 hrs)
PH 190: Intro to Public Health (3 hrs)
PH 195: Global Health Issues (3 hrs)
PH 360: Community Health and Social Justice(3 hrs)
PH 401: Epidemiology (3 hrs)
PH 409: Environmental Health (3 hrs)
PH 415: Health Behavior (3 hrs)
PH 480: Programs, Problems, and Policies in Public Health (3 hrs)
PH 425: Biostatistics (3 hrs)
Complete 3 hrs of Internship
PH 488: Internship (1-12 hrs)
Complete 12 hrs from:
COMM 380: Intercultural Communications (3 hrs)
COMM 410: Health Communications (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
ETH 200: Social Justice Movements (3 hrs)
GT 401: Biology/Health/Aging (1.5 hrs)
GT 402: Social Aspects of Aging ( 1.5 hrs )
GWS 101: Gender and Women Studies (3 hrs)
HE 111: Medical Terminology (1 hr)
PHIL 121: Introductory Ethics (3 hrs)
PHIL 316: Environmental Ethics (3 hrs)
PSYC 229: Social Psychology (3 hrs)
SOC 230: Social Problems of the Modern World (3 hrs)
SOC 460: Aging and Society (3 hrs)
Nutrition Emphasis
BIOL 110: Clinical Microbiology (3 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
EXSS 320: Nutrition, Performance \& Health (3 hrs)
PH 340: Public Health Nutrition (3 hrs)
PH 400: Food Science (3 hrs)

Free Electives (21 hrs)

39 Hours of 300/400 level courses

Combined

## BACHELOR OF SCIENCE/MASTER OF PUBLIC HEALTH

2019-2020 | 130 Hours Required

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Enduring Foundations General Education Requirements (42 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking
- FYS 112 or 312 First Year Seminar
Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
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Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
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Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
.
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- BIOL 107: General Biology -4 hrs (Pre-PT)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology (3 hrs)
- SOC 105: Introduction to Sociology (3 hrs)

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
.
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- PH 490: Integrative Experience

Overlay: Writing Across the Curriculum (4 courses)
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Combined Program Requirements ( 85 hrs )
NUTR 304: Nutrition Concepts-Controversies (3 hrs)
PH 190: Intro to Public Health (3 hrs)
PH 195: Global Health Issues (3 hrs)
PH 360: Community Health and Social Justice(3 hrs)
PH 488: Internship (3 hrs)
PH 501: Epidemiology (3 hrs)
PH 509: Environmental Health (3 hrs)
PH 515: Health Behavior (3 hrs)
PH 525: Biostatistics and Health (3 hrs)
PH 530: Health Economics (3 hrs)
PH 535: Public Health Law and Ethics (3 hrs)
PH 540: Strategic Management in Health Programs (3 hrs)
PH 542: Health Systems and Policy (3 hrs)
PH 543: Population-based Health (3 hrs)
PH 547: Survey Research Methods (3 hrs)
PH 580: Programs, Problems, and Policies in Public Health (3 hrs)
PH 590: Integrative Experience (3 hrs)
PH 598: Public Health Internship (3 hrs)
Complete 12 hrs from:
COMM 380: Intercultural Communications (3 hrs)
COMM 410: Health Communications (3 hrs)
EDUC 385: Multicultural Understanding (3 hrs)
ETH 200: Social Justice Movements (3 hrs)
HE 111: Medical Terminology (1 hr)
GT 401: Biology/Health/Aging (1.5 hrs)
GT 402: Social Aspects of Aging ( 1.5 hrs )
GWS 101: Gender and Women Studies (3 hrs)
PHIL 121: Introductory Ethics (3 hrs)
PHIL 316: Environmental Ethics (3 hrs)
PSYC 229: Social Psychology (3 hrs)
SOC 460: Aging and Society (3 hrs)
Health Policy Emphasis:
HSA 406: Jurisprudence and Ethics (3 hrs)
HSA 414: Health Care Management and HR (3 hrs)
HSA 420: Health Care Planning and Marketing (3 hrs)
Nutrition Emphasis:
BIOL 110: Clinical Microbiology (3 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
EXSS 320: Nutrition, Performance \& Health (3 hrs)
PH 340: Public Health Nutrition (3 hrs)
PH 400: Food Science (3 hrs)

39 Hours of 300/400/500 level courses

## Combined

## BACHELOR OF SCIENCE IN NURSING/ MASTER OF PUBLIC HEALTH

2019-2020 | 120 Hours Required

Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 105: College Algebra or higher

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 108: Elementary Chemistry (4 hrs) OR

CHEM 118: Principles of Chemistry (4 hrs)

- HS 205: Pharmacology (3 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology (3 hrs)
- SOC 105: Introduction to Sociology (3 hrs)

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

- NUTR 304: Nutrition Concepts/Controversies (3)

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- NURS 484: Professional Nursing Senior Seminar

Overlay: Writing Across the Curriculum (4 courses)
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Nursing Major Requirements (78 hrs)
EXSS 112: Human Anatomy and Physiology I (4 hrs)
EXSS 113: Human Anatomy and Physiology II (4 hrs)
BIOL 110: Clinical Microbiology (3 hrs)
NURS 165: Survey of Professional Nursing (3 hrs)
NURS 170: Therapeutic Relationship (3 hrs)
NURS 261: Fundamentals of Professional Nursing (3 hrs)
NURS 262: Clinical Component of Fundamentals (3 hrs)
NURS 264: Physical Assessment with Lab (3 hrs)
NURS 271: Healthy Families Across the Lifespan (3 hrs)
NURS 272: Clinical Component of Healthy Families (3 hrs)
NURS 361: Medical Surgical Nursing I (3 hrs)
NURS 362: Clinical Component of Adult \& Pediatric Medical Surgical Nursing I (2 hrs)
NURS 363: Mental Health Nursing (3 hrs)
NURS 364: Clinical Component of Mental Health Nursing (2 hrs)
NURS 371: Medical Surgical Nursing II (3 hrs)
NURS 373: Medical Surgical Nursing III (3 hrs)
NURS 374: Clinical Component of Medical Surgical Nursing II and III ( 4 hrs )
NURS 385: Research \& Evidence-Based Practice in Nursing (3 hrs)
NURS 463: Leadership \& Management in Professional Nursing (3 hrs)
NURS 467: Global Health Nursing (3 hrs)
NURS 468: Clinical Component of Global Health Nursing (4 hrs)
NURS 469: Strategies for Success in Professional Nursing (2 hrs)
NURS 477: Complex Medical Surgical Nursing (3 hrs)
NURS 478: Clinical Management of Complex Clients (4 hrs)
Complete one from:
QM 227: Introduction to Statistics (3 hrs)
SOC 344: Intro to Behavioral Statistics (3 hrs)
HSA 467: Statistics Appraisal/Evaluation (3 hrs)
PSYC 245: Statistics for Psychologist (3 hrs)
39 Hours of 300/400 level courses
Master of Public Health Requirements
During spring of senior year, complete two from:
PH 525: Biostatistics (3 hrs)
PH 542: Health Systems and Policy (3 hrs)
Once BSN is earned:
PH 501: Epidemiology (3 hrs)
PH 509: Environmental Health (3 hrs)
PH 515: Health Behavior (3 hrs)
PH 530: Health Economics (3 hrs)
PH 535: Public Health Law and Ethics (3 hrs)
PH 540: Strategic Management in Health Programs (3 hrs)
PH 543: Population-Based Health (3 hrs)
PH 547: Survey Research Methods (3 hrs)
PH 580: Programs, Problems, and Policies in Public Health (3 hrs)
PH 590: Integrative Experience (3 hrs)
PH 593: Practicum (3 hrs)

# Dunigan Family School of Nursing 

Faculty: Cobb, Fedor-Bassemier, LaMar (Chair), Lever, Maier-Hammock, Price, Rea, Schaefer, Thomas, Wooton

## Bachelor of Science in Nursing

The nursing faculty is committed to education that involves the acquisition of knowledge, skills,and professionalexperience.Thestudy oftheartandscienceofnursing iscoordinatedwith the study of natural, behavioral, and social sciences, emphasizing learning through practice in variousclinical settings.Upon program completion, graduates are eligible to takethe National Council Licensure Examination for Registered Nurses. Graduates are prepared for beginning professional practice positions in varied settings as well as for entry into graduate study.

The BachelorofScience in Nursing degree program is accredited by the AccreditationCommission for Education in Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326, www.acenursing, 404-975-5000. It is also accredited by the Indiana State Board of Nursing. The Dunigan Family School of Nursing is a member of the American Association of Colleges of Nursing and the National League for Nursing.

To graduate with a BSN degree the student must complete all the courses in the nursing curriculum plan and maintain an overall cumulative GPA of at least 2.5 and a nursing cumulative GPA of at least 2.5. Additionally, students must have a grade of C- or above in all nursing courses as well as in Biology 110, Chemistry 108 or 118, Exercise and Sport Science 112, 113, Health Sciences 205, Nutrition 304, Psychology 121, and Sociology 105. Specific information regarding curriculum progression policies is found in the University of Evansville Baccalaureate Program in Nursing Student Handbook.

Studentsinthenursingmajormayparticipateinacampus-basedstudentnurseorganization andare consideredforinduction intotheEta LambdaChapter ofSigmaThetaTau International Nursing Honor Society.

## Fees and Assistance

InadditiontoregularUniversitycosts,additionalexpensesincurredbynursingstudentsinclude, butarenotlimitedto,immunization,testingandlabfees,criminalbackgroundchecks,drugscreen, uniforms,andtraveltoclinicalsites.Allstudentsarerequiredtohavealaptopornetbookthatmeets University ofEvansvillerecommendedcomputersystemrequirements.Startinginthesophomore year, students must have an iPod Touch or iPad mini with required nursing references installed. Students shouldconsulttheOffice ofStudentFinancialServicesforinformationaboutadditional financial aid available to students in the nursing major.

## Clinical Facilities

Several types of clinical facilities are used in the educational programs of the department. These include inpatient, outpatient, and various community health care settings.Students may have an opportunity to study nursing at Harlaxton College in England or in other countries through study abroad courses.

## Admission

Entering freshmen may qualify for direct entry into UE's Bachelor of Science in Nursing program. University of Evansville accepted applicants must meet the following requirements in order to be accepted directly into the BSN program: a minimum of four years of English and three years of mathematics, a minimum of three years of science (including grades of C or above in two semesters of chemistry), and SAT-R score of 1100 or above or ACT score of 22 or above.Studentsmeetingacademicrequirementsalsomustbeingoodhealth,eligibleforlicensure, certification, orregistrationand capableofmeeting clinical practicerequirements.Studentswho do notmeetadmission criteria are consideredonanindividual basis bythe program's Admission, Standards, and ProgressionCommittee.Applicantstotheprogrammayberequestedtoarrangea personalinterviewwithafacultymember.Theprogramacceptsstudentswhochangetheirmajors, transferstudents,andinternationalstudents.Studentsinterestedintransferringtothenursing program and international students must contact the Dunigan Family School of Nursing for specific admission and transfer policies.

Nursing at Harlaxton College in Grantham, England
Nursing course work is offered in the fall semester at the Harlaxton near Grantham, England. Students at the senior level in the nursingprogrammayhaveanopportunityto participate.Fordetails, contact the Dunigan Family School of Nursing

## Combined Program with Master of Public Health

Students pursuing a BSN also have the option to earn a Master in Public Health degree in their 5th year. See Public Health for program requirements.

## Bachelor of Science

## NURSING

2019-2020 | 121 Hours Required

Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
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-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 105: College Algebra or higher

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 108: Elementary Chemistry (4 hrs) OR

CHEM 118: Principles of Chemistry (4 hrs)

- HS 205: Pharmacology (3 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology (3 hrs)
- SOC 105: Introduction to Sociology (3 hrs)

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

- NUTR 304: Nutrition Concepts/Controversies (3)

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- NURS 484: Professional Nursing Senior Seminar

Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (78 hrs)
EXSS 112: Human Anatomy and Physiology I (4 hrs)
EXSS 113: Human Anatomy and Physiology II (4 hrs)
BIOL 110: Clinical Microbiology (3 hrs)
NURS 165: Survey of Professional Nursing (3 hrs)
NURS 170: Therapeutic Relationship (3 hrs)
NURS 261: Fundamentals of Professional Nursing (3 hrs)
NURS 262: Clinical Component of Fundamentals (3 hrs)
NURS 264: Physical Assessment with Lab (3 hrs)
NURS 271: Healthy Families Across the Lifespan (3 hrs)
NURS 272: Clinical Component of Healthy Families (3 hrs)
NURS 361: Medical Surgical Nursing I (3 hrs)
NURS 362: Clinical Component of Adult \& Pediatric Medical Surgical Nursing I (2 hrs)
NURS 363: Mental Health Nursing (3 hrs)
NURS 364: Clinical Component of Mental Health Nursing (2 hrs)
NURS 369: Strategies for Professional Nursing Practice (1 hr)
NURS 371: Medical Surgical Nursing II (3 hrs)
NURS 373: Medical Surgical Nursing III (3 hrs)
NURS 374: Clinical Component of Medical Surgical Nursing II and III ( 4 hrs )
NURS 385: Research \& Evidence-Based Practice in Nursing (3 hrs)
NURS 463: Leadership \& Management in Professional Nursing (3 hrs)
NURS 467: Global Health Nursing (3 hrs)
NURS 468: Clinical Component of Global Health Nursing (4 hrs)
NURS 469: Strategies for Success in Professional Nursing (2 hrs)
NURS 477: Complex Medical Surgical Nursing (3 hrs)
NURS 478: Clinical Management of Complex Clients (4 hrs)
Complete one from:
QM 227: Introduction to Statistics (3 hrs)
SOC 344: Intro to Behavioral Statistics (3 hrs)
HSA 467: Statistics Appraisal/Evaluation (3 hrs)
PSYC 245: Statistics for Psychologist (3 hrs)
39 Hours of 300/400 level courses

## RN to BSN Option

## RN to BSN Option

The University of Evansville offers registered nurses (RNs) an opportunity for advanced placement in the baccalaureate nursing program. The program focuses on meeting the needs oftheadultlearnerandworking nurse.Graduates oftheprogramdemonstrateenhancecritical thinking skills, advanced knowledge of health care issues, research, quality improvement, and leadership.Theeducational planfortheRNto BSNstudentshares the sameprogramoutcomes as the undergraduate nursing program while providing an accelerated pathway to earn a BSN.

Completion of the option requires a total of 120 credit hours. While at UE, RN to BSN students complete a total of 9 nursing courses, which total 32 credit hours. Students in the RN to BSN Program may petition to earn up to 7 hours of nursing credit for work experience or specialty certifications.

Upon successful completion of Nursing 351 (Transition to Professional Nursing), RNs who are graduates of anaccrediteddiplomaorassociate degreeinnursing program receivecreditfor34 hours in nursing, 3 hours for nutrition, and 3 hours for pharmacology. The remaining 48 hours of general education and BSN required credit hours for the BSN degree may be transferred in from another college or university or taken at UE.

## Admission Requirements for the RN to BSN Option

- Admission to the University of Evansville
- Unencumbered current United States registered nurse license
- Completion ofdiplomaorassociatedegreeinnursingfromanaccreditednursing program
- Minimum cumulative college GPA of 2.5 on a 4.0 scale


## RN TO BSN

2019-2020 | 121 Hours Required
Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- NURS 351 RN to BSN Transition to Professional Nursing

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 105: College Algebra or higher

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 108: Elementary Chemistry (4 hrs) OR

CHEM 118: Principles of Chemistry (4 hrs)

- HS 205: Pharmacology (3 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge

- PSYC 121: Introduction to Psychology (3 hrs)
- SOC 105: Introduction to Sociology (3 hrs)

Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness

- NUTR 304: Nutrition Concepts/Controversies (3)

Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- NURS 484: Dynamic Integration: Health Issues

Overlay: Writing Across the Curriculum (4 courses)
-
-
-
-

Major Requirements (78 hrs)
EXSS 112: Human Anatomy and Physiology I (4 hrs)
EXSS 113: Human Anatomy and Physiology II (4 hrs)
BIOL 110: Clinical Microbiology (3 hrs)
NURS 165: Survey of Professional Nursing (3 hrs)
NURS 170: Therapeutic Relationship (3 hrs)
NURS 261: Fundamentals of Professional Nursing (3 hrs)
NURS 262: Clinical Component of Fundamentals (3 hrs)
NURS 264: Physical Assessment with Lab (3 hrs)
NURS 271: Healthy Families Across the Lifespan (3 hrs)
NURS 272: Clinical Component of Healthy Families (3 hrs)
NURS 361: Medical Surgical Nursing I (3 hrs)
NURS 362: Clinical Component of Adult \& Pediatric Medical Surgical Nursing I (2 hrs)
NURS 363: Mental Health Nursing (3 hrs)
NURS 364: Clinical Component of Mental Health Nursing (2 hrs)
NURS 369: Strategies for Professional Nursing Practice (1 hr)
NURS 371: Medical Surgical Nursing II (3 hrs)
NURS 373: Medical Surgical Nursing III (3 hrs)
NURS 374: Clinical Component of Medical Surgical Nursing II and III ( 4 hrs )
NURS 385: Research \& Evidence-Based Practice in Nursing (3 hrs)
NURS 463: Leadership \& Management in Professional Nursing (3 hrs)
NURS 467: Global Health Nursing (3 hrs)
NURS 468: Clinical Component of Global Health Nursing (4 hrs)
NURS 469: Strategies for Success in Professional Nursing (2 hrs)
NURS 477: Complex Medical Surgical Nursing (3 hrs)
NURS 478: Clinical Management of Complex Clients (4 hrs)
Complete one from:
QM 227: Introduction to Statistics (3 hrs)
SOC 344: Intro to Behavioral Statistics (3 hrs)
HSA 467: Statistics Appraisal/Evaluation (3 hrs)
PSYC 245: Statistics for Psychologist (3 hrs)
39 Hours of 300/400 level courses

Bachelor of Science with a Major in Organizational Leadership

Bachelor of Art or Bachelor of Science with a Major in University Studies

The Center for the Advancement of Learning demonstrates the University of Evansville's commitment to lifelong learning. The unit serves nontraditional students through both credit and non-credit offerings. Two master's degree programs and two bachelor's degree program designedespeciallyforadultsareofferedintheeveningsandonline.Non-creditclassesthatmeet professionalandpersonaleducationalneedsallowcommunitymemberstoupdateessentialskills or develop new interests. Additionally, the Center for the Advancement of Learning provides customized education and training to area businesses and industries.

Organizational Leadership
TheBachelorofSciencedegreewithamajorinorganizationalleadershipisdesignedspecificallyforthematureadultlearnerwhohasearnedanAssociate of Arts,AssociateofScience,orits equivalent ( 60 hours), and meets University of Evansville general education requirements. The Universitydesignedtheorganizationalleadershipprogramtoassistmid-careeradultlearnerswho wish to complete a bachelor's degree. The Center for the Advancement of Learning offers this undergraduate degree program during the evening.

## Objectives

Theprimaryobjectivesoftheorganizationalleadership programaretoassisteachlearnerin the following:

- Incorporation of the major dimensions of the general education core goals in course work completedbystudents, includingcriticalthinkingskills,dataandstatisticalanalysis,effective writing and creative expression, and the ability to assess and render judgments of value in such areas as ethics, aesthetics, and public policy
- Developmentofathoroughunderstandingofthetheoryand practicesassociatedwithmodern leadership and organizational management
- Developmentoftheknowledgeandskillsinresearch,criticalthinkingand problemsolving, and decision making
- Involvementinteamworkandleadershipdevelopmentthroughparticipationinclassroom activities and applied research projects
- Understanding of professional ethics and its application to organizational environments

An emphasis on leadership and global issues provides learning experiences which not only enrichthelifeoftheindividual butalsodevelopunderstandingandcompetenciestomeetimportant societal needs. In the age of change and specialization, the generalist who understands the totality ofthehumanconditionandcanmakewisedecisionswillmakeasignificantcontributionto society.Theorganizationalleadership programattheUniversityofEvansvilleisdesignedtomeet this societal need and to assist students in achieving their full potential.

Thepurposeoftheprogramistoprovidequalifiedindividualswiththeopportunitytocomplete abachelor'sdegreeanddevelopintellectualcapacitiesnecessaryforsuccessfulleadership.The mostsignificantlearningobjectiveistoadvancestudents'abilitiesinstrategicthinking, problem solving, anddecisionmaking.Studentswillbeengagedinthepracticeandapplicationofthefundamentalconceptsneededforsupervisionandleadership.Thecurriculumisdesignedtodevelop social responsibility and foster a global perspective.

## University Studies

TheUniversityStudiesdegreeisunique,flexibleacademicprogramthatallowsadultstudents whohavebeenoutofhighschoolforfiveyearsormore,theopportunitytoobtainanundergraduatedegreefromtheUniversity ofEvansville.StudentsmaychooseeithertheBachelorofArtsor Bachelor of Science degree with two distinct pathways for degree completion.

- Pathway 1 isforadultswhohavealreadyearnedanAssociateofArtsorAssociateofScience or its equivalent (60 hours).
- Pathway 2 is for adult students who have not earned any previous college credit or have a limited amount of credit earned.

The flexible nature of this program provides courses available in both the traditional classroom and in an online format. The student will work directly with their advisor to map out a distinct academic plan and will choose courses that work best to satisfy the needs for the degree completion.

Theprogramisdesignedtoallowstudentstocreateanindividual planofstudybyselecting coursesthatwillassistinthedevelopmentof intellectualand practicalskills, personalandsocialresponsibility, and thecompetenciesnecessaryforcareerdevelopmentandadvancement. Courses are offered in-seat and in online formats.

Up to 12 hours of prior learning credit may be available. The studentmustbeadmittedtotheprogramtosubmitaportfolioforreview for each course for which prior learning credit is requested. There is astandardfeeforportfolioassessmentandforthecollege-equivalent credit awarded.

Applicants with military training and experience may be able to receive up to 12 credit hours depending on their military experience and the degree program the student chooses. A full review of the transcripts will be completed after an offer of admission is granted.

## Bachelor of Science

## ORGANIZATIONAL LEADERSHIP

2019-2020 | 63 Hours Required

## Complete all of the following:

CHNG 280 Social Entrepreneurship (3 hrs)
CHNG 330 Transformative Action (3 hrs)
FYS 312 Writing Across the Disciplines (3 hrs)
OL 300 Adult Learner (3 hrs)
OL 310 Applied Leadership (3 hrs)
OL 311 Quantitative Skills for Leadership (3 hrs)
OL 312 Human Behavior in Organizations (3 hrs)
OL 320 Persuasive Written and Oral Communication (3 hrs)
OL 321 Principles and Issues of Human Resources (3 hrs)
OL 322 Leadership Ethics (3 hrs)
OL 330 Supervision (3 hrs)
OL 350 Leadership Practicum (3 hrs)
OL 360 Leadership Practicum (3 hrs)
OL 410 Leadership: Conflicts and Change (3 hrs)
OL 411 Leadership: Strategic Decision-Making (3 hrs)
OL 412 Customer Development and Leadership (3 hrs)
OL 420 Global Issues Seminar (3 hrs)
OL 421 Organizations: A Strategic Approach (3 hrs)
OL 422 Leadership: Individual and Team Processes (3 hrs)
GL 430 Technology for Leaders (3 hrs)
OL 460 Capstone (3 hrs)

## Bachelor of Arts

## UNIVERSITY STUDIES

## 2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements

 (47 hours)Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge -

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (12 hrs) Linguistic and Cultural Competence in Language
-
-
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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-
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-

Major Requirements (58 hours)

- OL 300 (if less than 30 hours of college credit)

Free Electives (15 hours)

39 Hours of 300/400 level courses

## Bachelor of Science

## UNIVERSITY STUDIES

## 2019-2020 | 120 Hours Required

## Enduring Foundations General Education Requirements

 (47 hours)Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge
-
Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place
-
Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy
-
Outcome 8: (7 hrs with at least one lab course) Scientific Literacy
-
-
Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
$\cdot$
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically and Communicate Orally and in Writing
-
Overlay: Writing Across the Curriculum (4 courses)
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Major Requirements (58 hours)

- OL 300 (if less than 30 hours of college credit)

Free Electives (21 hours)

39 Hours of 300/400 level courses

## College of Engineering and Computer Science

## Ying Shang, Dean

The College of Engineering and Computer Science is composed of the Department of Electrical Engineering and Computer Science and the Department of Mechanical and Civil Engineering. Baccalaureatedegreesareofferedintheprofessionalareas ofcivilengineering, computerengineering,electricalengineering,mechanicalengineering, softwareengineering, andcomputerscience.Aminorinengineering management is offered in conjunction with the Schroeder Family School of Business Administration. A Biomedical Option is available in Electrical Engineering andinMechanical Engineering.TheCollege alsooffersanEnergyEngineeringCertificate.TheDepartmentofElectrical Engineering and Computer Science offers a minor in computer science.

Themission oftheCollege of Engineering and ComputerScience is to provide high quality, personalized educational experiences in engineeringorcomputersciencetotalentedandmotivatedstudents who seek a baccalaureate degree.

All programs intheCollegeofEngineeringandComputerScience share certain goals:

- Graduates will know the fundamentals of mathematics, basic science,andengineeringand/orcomputerscienceappropriateto theirmajordiscipline.Theirlevelofknowledgewill besufficientto permitthemtoenterprofessional practiceortopursueadvanced study and will serve as the basis for continued learning, both formally and informally.
- Graduates will possess certain skills, including, but not limited to,teamwork,communicationskills, criticalthinking, computer skills, problemsolving,informationmanagementskills,anddeci-sion-making, as appropriate to their discipline. Their skill level will besufficientto permitthemtoenterprofessional practiceor to pursue advanced study.
- Programs will assist students in developing personal values. Emphasis is placed on ethical behavior, global-mindedness, active citizenship, and intellectual growth.
The curricula of the various programs provide an appropriate balancebetweenhumanities,fineartsandsocialsciences, the physical sciencesandmathematics, theengineeringsciences,anddesignandcreativeactivities.Ourprogramsarerichin project-basedlearning,team experiences, and close faculty-student interaction.

The civil engineering program, computer engineering program, electricalengineering program,andmechanicalengineering program are accredited by the Engineering Accreditation Commission (EAC) of ABET,www.abet.org.Thecomputerscienceprogramisaccredited by the Computing Accreditation Commission (CAC) of ABET, www. abet.org.

TheUniversity haschapters oftheengineeringhonorsocieties:Chi Epsilon for civil engineers, Eta Kappa Nu for electrical and computer engineers,PiTauSigmaformechanicalengineers,andTauDeltaKappa for all branches of engineering and computer science. Membership is available in student chapters of the following national professional societies: American Society of Civil Engineers (ASCE), American Society of Mechanical Engineers (ASME), American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), Association for Computing Machinery (ACM), Institute of Electrical and Electronics Engineers (IEEE), Society of Automotive Engineers (SAE), and Society of Women Engineers (SWE).

Admission Requirements
Studentswhohaveexplicitlydemonstratedtheabilityandpreparationneededtosuccessfullycompleteadegreeprogramoftheirchoice will be considered for admission. The number of students admitted toeach degreeprogramislimitedbyavailablespaceandresourcesto ensure a high quality, personalized, educational experience.Admis-siontoaspecificdegreeprogramisathree-partprocess:(1)admission to the University, (2) admission to the lowerdivision of the College of Engineering and Computer Science, and (3) admission to the upper divisionofoneofthedepartmentsasacandidateforaspecificdegree.

Admission to the College of Engineering and Computer Science lowerdivisionforcivilengineering, computerengineering, electrical engineering,softwareengineeringandcomputerscienceisbasedon standardizedtestscores(SATorACT) andspecifichigh school course work grades. Minimum acceptable test scores are 560 on the math portion of the SAT or 25 on the math portion of the ACT. Minimum high school preparation must include the following:

- Three-and-one-halfyears ofmathematicscomprisingtwoyears ofalgebra, oneyearofplanegeometry, andone-halfyearoftrigonometry with an average grade of $B$ or better
- Twoyears of science including at least one year of chemistry with a laboratory and an average grade of $B$ or better
- Four years of English
- Applicantswhosenativelanguage is notEnglishmustachievea minimum TOEFL score of 70 or IELTS score of 6.0.
- Highly recommended additional high school course work includes:
- One or more years of physics
- Additional chemistry
- Additional mathematics such as analytic geometry, college algebra, calculus
- Two or more years of a foreign language

Admissiontomechanicalengineeringlowerdivisionisdescribedin the Mechanical Engineering Program section.

Students whodonotmeet thesestandardsmaybeadmitted with pre-engineeringstatus.Pre-engineeringstudentswillconcentrateon specificmathematics courses and othercourses intended to prepare them for full admission to the lower division of engineering. Full admission will typically be granted upon petition after achieving grades of $C$ or better in Mathematics 221 and Chemistry 118, and, for students whose native language is not English, demonstrating proficiency in English.

In some cases, an interview between an applicant and a faculty member or alumnus will be considered in the admission and financial aid process. Other evidence of exceptional motivation will be considered in marginal cases such as related (high school) elective coursework,hobbies,extracurricularactivities,orapre-engineering exploration program.

## Admission of Transfer Students

Application materials from transfer students are reviewed at two levels. At the university level, a minimum grade point average of 2.0 is required for acceptance. The Office of the Registrar reviews the overall recordanddeterminesthetransferstatusofgeneraleducationandother non-technical courses. Materials are then sent to the College of Engineering and Computer Science, either to the dean or to the chair of the appropriatedepartment.Thedeanorchairdeterminestheacceptability
ofanyengineering(andsometimesmathematicsorscience)coursespresentedfortransferandalsomakesthedecisiontograntordenyadmission to the program.
Students Currently Pursuing a Degree at the University of Evansville

Studentscurrentlypursuingadegreeinengineeringorcomputer science at UE may take courses elsewhere for transfer to UE. (See the "Academic Policies and Procedures" section of this catalog for the University policies regarding transfer work.) Normally, such courses will be taken during the summer or while the student is on a co-op assignment. For engineering courses at the 200 level or above, only those taken from EAC-ABET or CAC-ABET accredited programs maybetransferred.Coursesinmathematics,science,orgeneraleducationmaybetransferredfromanyregionallyaccrediteduniversityor juniorcollege.Anyengineeringcoursesmusthavethepriorapproval ofthedeanortheappropriatedepartmentchair.Generally,approval totakearequiredengineering courseelsewherewill begrantedonly in exceptional circumstances.

## Credit for Courses Taken Elsewhere

Course work presented by an applicant for transfer of credit is carefully reviewed bythe Office ofthe Registrartogetherwith either the dean of engineering and computer science or the appropriate department chair. Only courses with a grade of C ( 2.0 on a 4 point scale) or better may be transferred. Engineering courses taken from an EAC-ABET or CAC-ABET accredited program will be transferred whenthereisaclearcorrespondencewithaUEcourse.Othercourses (science, mathematics, and general education) may be transferred with a grade of $C$ or better if taken at a regionally accredited institution. An exception to this policy will be granted if a formal articulationagreement is in place.Inallothercases oftechnical/engineering courses taken from non-EAC/CAC-ABET accredited programs, suitability for transfer is evaluated by review of the course syllabiand/or student'swork.Whenaclearone-to-onecorrespondenceexistswith one or more of our engineering courses and the student has at least a grade of $C$, credit may be granted up to a maximum of 12 hours (or four courses), at the discretion of the dean or department chair. High quality course work (with grade of C orbetter) of obvious merit for an engineer but not corresponding to one of our courses may be accepted as technical elective or free electives up to a maximum of seven hours (two courses).

Inthecaseofcoursesfromnon-U.S.schools,syllabiandstudentwork are reviewed and, where apparent equivalence is found, credit may be granted on a conditional basis. The condition is generally in the form of requiringaCorbetterperformanceinoneormorecourseswhoseprerequisites include the work to be transferred.

Studentsrequestinganexceptiontothesepoliciesmaypetitionthe CollegeofEngineeringandComputerScienceExecutiveCommitteeor theUniversity's AdmissionsandStandardsCommittee,asappropriate.

## Engineers at Harlaxton College

HarlaxtonCollegestudyforonesemesterishighlyrecommended forengineering and computer sciencestudents.Normally, students are encouraged to plan for Harlaxton study during the fall semester of the second year. Some students may have additional options for scheduling Harlaxton study, including in the summer. Degree plans for engineering or computer science students that include study at Harlaxton are available from College of Engineering and Computer Scienceacademicadvisors.Studentswhowishtostudy at Harlaxton shouldbeginplanningwiththeiracademicadvisorasearlyaspossible.

Personal Computers
Allstudents inthe College of Engineering and Computer Science are required to have a personal computer. Students who do not own a personal computerarestronglyencouraged to acquireoneduring theirfirstsemesteroffull-timestudies.SeveralspeciallyequippedPCs are provided by the collegetoaugmentstudents' PCs ;someofthese and otherPCsprovidedintheUniversity's academic computing labs canbeusedonatime-availablebasisuntilstudentsacquiretheirown PC. Incoming students should consult their academic advisor or the dean'sofficeforinformation onrequiredminimumPCspecifications.

## Degree Requirements

In addition to meeting all degree requirements of the University, students in the College of Engineering and Computer Science must meetspecificdepartmental requirementsdescribedinthefollowing sections. These include: University Enduring Foundations General Education requirements, courses required foreach degree, and area electives chosen from approved course work for each degree.

ExceptionstorequirementsfordegreesandpoliciesoftheCollegeof EngineeringandComputerSciencemaybeapprovedwhenunusualand mitigatingcircumstancesarepresent.Studentsmayrequestapprovalfor suchexceptions bysubmitting anacademic petition with theacademic advisor'sapprovaltotheappropriatedepartmentchairforconsideration by the dean and department chair.

The degree programs in engineering and computer science can normally becompleted in eight semesters offull-time study (potentially including one semester at Harlaxton College) by the entering student with adequate high school preparation or its equivalent.

## Co-op Program

A cooperative education plan for all of the college's programs is availableasanalternativetothetraditionalfour-yearplan.Theco-op plancombinesclassroomeducationwithfull-timeworkexperiencein industry.PleaserefertoSpecialEducationalOpportunitieslocatedin the "Degrees, Curriculum, Academic Opportunities" section of this catalog.
Other Opportunities for Work Experience
Studentsdesiringasmallerscaleworkexperiencemayparticipate in an internship or concurrent co-op. In the College of Engineering and Computer Science, an internship is a full-time, paid work experience lasting at least 8 weeks. Most internship opportunities occur in the summer.

Concurrent co-op is a plan wherein full-time students work part timeina professionalenvironment.Studentscarryafull-timecourse load and work eight to 15 hours per week. Concurrent co-op is most often used as a pre-co-op experience or as a post-co-op experience when employers wish to have former co-op students carry a work project to completion.

## Engineering Management and the Energy Engineering Certificate

Engineering Management Program Director: Swenty $n$ Energy Engineering Certificate Program Director: Stamps

Aminorinengineering management is offered bytheCollege of Engineering and Computer Science in cooperation with the Schroeder Family School of Business Administration.

Theminor in engineering management has two sets of courserequirements.Onesetcomplements a major in engineering or computer science; the other set complements a major in business administration or accounting. In order to earn the engineering management minor, the student mustalsoearntheappropriateaccounting,business,computerscience,orengineering degree.The minorisespeciallyappropriateforstudentsseekingcareersinoperations,productionmanagement, constructionmanagement,ortechnicalsalesandmarketing.Itisalsoameansbywhichundergraduate engineeringstudentscanprepareforfuturegraduatestudiesineitheranMBAorgraduateprogramin engineering management.

## Engineering Management Minor (18 hours)

The following courses are required for students whose major is civil engineering, computer engineering,electricalengineering,mechanicalengineering,softwareengineeringorcomputer science.

Economics 101* or 102*; Engineering 390, 409; Interdisciplinary 150 or Communication 380; Management 331 or 377 ; Management $310^{\dagger}$ or Civil Engineering 324
Thefollowing courses are required for students whosemajor is accounting orbusinessadministration.

Chemistry 118*; Civil Engineering 324 or 374; Engineering 101 or Electrical Engineering 210; Mathematics 134 or 221*; Mechanical Engineering 197; Physics 121* or 210*
Energy Engineering Certificate (12 hours)
A certificate in energy engineering is available to students in the engineering programs. This certificatepreparesengineersforcareersintheenergyindustry.Studentsmayearnthecertificate by completing the following requirements:

Electrical Engineering 430; plus any three of the following:Civil Engineering 374;Electrical Engineering 330; Mechanical Engineering 463, 470, 472, 476; Civil Engineering 497 or Electrical Engineering 497 or Mechanical Engineering 497 (with an approved energy-focused project) or Cooperative Education 91-95 or Experiential Education 71-73 (with an approved energy-focused employer).
With careful curriculumplanning includinganapprovedenergy-focused projectorco-op,engineeringstudentscanearnanenergyengineeringcertificatebytakingnomorethanoneadditional course.
The Energy Engineering Certificate may also be earned by persons who already hold a degree in engineering.Inthiscasethe497,CooperativeEducation,and Experiential Educationcourseswill not be counted towards the Certificate.

## Bachelor of Science in Electrical Engineering

Bachelor of Science in Electrical Engineering: Biomedical

Bachelor of Science in Computer Engineering

Bachelor of Science in Software Engineering

Bachelor of Science in Computer Science

TheDepartmentofElectricalandComputerScienceoffersfourbaccalaureatedegrees:Bachelor of Science in Electrical Engineering, Bachelor of Science in Computer Engineering, Bachelor of ScienceinSoftwareEngineering, andaBachelorofScienceinComputerScience.Boththeelectri-calengineeringandcomputerengineeringprogramsareaccreditedbytheEngineeringAccreditation Commission (EAC) of ABET, www.abet.org. The computer science program is accredited by the Computing Accreditation Commission (CAC) of ABET, www.abet.org. Students in any of the baccalaureatedegreeprogramsmayparticipateincooperativeeducation.Thedegreerequirements forco-op students arethe sameas those shown below. The sequencing fortheco-op program is describedintheCollegeofEngineeringandComputerScienceprogramdescription.Studentswho wishtoenrollatHarlaxtonCollegewillfollowamodifiedcoursescheduleandshouldconsulttheir academic advisor.

Student chapters of the Institute of Electrical and Electronics Engineers and the Association forComputingMachineryaresponsoredbythedepartmenttosupportandencouragethepro-fessionaldevelopmentofthestudents.Studentsmayalsoparticipateincollege-widechaptersof the Society of Women Engineers and the National Society of Black Engineers.

## Objectives

The electrical engineering, computer engineering, software engineering, and computer scienceprogramssharethefollowingobjectivesthatapplytograduatesthreetofiveyearsafter graduation:

- Graduates will be engaged in a professional career and/or continued or advanced study in their chosen field. This implies that graduates will recognize the value and necessity of lifelong learning.
- Graduateswillbeengagedinapplicationsofproblemsolvingandcommunicationskillsfor a wide variety of problems in engineering and/or computer science, either as individuals or in teams.
- Graduates will be active ethical participants in a local, national, or global engineering or computer science community.


## Electrical Engineering

Electrical engineering is a very broad field and the undergraduate electrical engineering program matches this breadth by introducing the student to almost every aspect of electrical engineering.Modernlife is permeated with electric devices, ranging from the ubiquitous small electric motor and the computer controlled appliance to the fiber optic communications link. Electrical engineering has transformed the way we live and the way we think about the natural world.Thistransformationisongoingandtobesuccessfulintheprofession,electricalengineers mustbeopen to the continuouslearning of new concepts and ideas. At the sametime, the electrical engineer must be a responsible and ethical member of society.

Electricalengineeringisachallengingfield.Careeropportunitiesareavailableinmanufacturing,research,anddevelopment.Thebachelordegreecanalso provideaccesstograduateschool where students can continue their professional studies.

Thecurriculuminelectricalengineeringispurposefullybroadandplacesahighvalueoncreativity, invention,thecontinuallearning ofnewconcepts,andtheethical practiceoftheprofession.Thefirst twoyearsoftheprogramprovideafirmfoundationinmathematics,naturalscience,basicengineering analysis anddesign, andanappreciationforthehumanities andsocialsciences. Thetechnical partof the first two years provides instruction in the C++ programming language, electric circuit analysis, computeraideddesignandsimulation,andthelogicaldesignofdigitalcircuits.Laboratoriesemphasizetheuseofcomputersand provideinstructionintheuseofbasicinstrumentationcommontothe profession.

Thelasttwoyearsofthe programareprojectoriented.Studentstakeprojectlabsinwhichthey areassignedopen-endedprojectsrequiringinventionanddesigntomeetspecifications.Manystu-dentsworkone-on-onewith professors.Class sizesforupper-levelelectives rangefromassmallas fourstudentstoaslargeas 25 .Somespecializationispossibleinthelastthreesemesterswhenastudent canchoosetwotechnicalelectivesinareassuchascomputers,electronics,electro-optics,powersystems, orlinear systems and controls. In addition to the design labs that are required, most courses at thejuniorandseniorlevelhavesemester-longprojectsaspartofthecoursehomework.Manyprojects requireteamwork. Forexample, inthemicrocontroller course(Electrical Engineering 454) students typically design and constructa system requiring a real timemicrocontroller.Inthe communication electronicscourse(Electrical Engineering440), students design completecommunication systems fora semester-long project.During the senioryear,every electrical engineering student is required
tocompleteayear-longseniordesign projectthatis oftensponsoredby industry.Duringthefirstsemester,thestudentwritesaproposalanddoes apreliminarydesign.Thisdesignissubjecttoadesignreviewprocessand a formal presentation of the ideas and concepts is required. During the secondsemester,thestudentcompletesthedesignandconstructsafinal product. .

With careful curriculum planning including an approved ener-gy-focused projectorco-op,engineeringstudentscanearnanenergy engineering certificatebytaking nomorethanoneadditional course.
TheEnergyEngineeringCertificatemayalsobeearnedbypersonswho already holdadegreeinengineering.Inthiscasethe497,Cooperative Education, and Experiential Education courses will not be counted towards the Certificate.

## Biomedical Option in Electrical Engineering

Electrical engineering majors may earn a bachelor's degree in electrical engineering with a biomedical option.

## Computer Engineering

Computerengineering bridges the areas of electrical engineering andcomputerscience.Computerengineeringgraduatesaresoughtby industriesinvolvedwithindustrialautomationandembeddedcomputer systems. The program in computerengineering provides anin-depth understanding ofthosetopicsinelectricalengineeringthatarerelated tothedesignanduse of computersaswellas thosetopics in computer sciencethatdealwithsoftwaredesignandimplementation,particularly thoseapplicationsthatinvolvereal-timeoperation.Computerengineers typicallydesignsystemsthathavededicatedcomputersofwhichtheuser islargelyunaware.Sometypicalcomputerengineeringapplicationsare enginecontrollersandbodycomputersinautomobiles,numerouscomputer controlled appliances such as the VCR, microwaveoven, washing machine, and industrial automation including industrial robots. The computerengineeringcurriculumprovidesabroad-basedunderstanding ofbothhardwareandsoftwareandtheirinteraction,aswellasanopportunitytostudyparticularaspectsinmoredepth.Computerengineering isarapidlychangingareaandtobeeffectiveintheprofession,computer engineersmustbeopentothecontinuouslearningofnewconceptsand ideas.Atthesametime,thecomputerengineermustbearesponsibleand ethical member of society.

Computer engineering is a challenging field. Career opportunities are available in manufacturing, research, and development. Thebachelor'sdegreecanalsoprovideaccesstograduateschoolwherestudents can continue their professional studies. The curriculum in computer engineeringis purposefullybroadand placesahighvalueoncreativity, invention, thecontinuallearning ofnewconcepts, andtheethical practice of the profession.

The first two years of the program provide a firm foundation in mathematics, natural science, basic engineering analysis, and design, and an appreciation for the humanities and social sciences. The technical part of the first two years provides instruction in the C++ programminglanguage, datastructures, electriccircuitanalysis, computeraideddesignandsimulation, andthelogicaldesignofdigitalcircuits.Laboratoriesemphasizetheuseofcomputersandprovide instructionincurrentmethodsofsoftwaredesignandintheuseofbasic instrumentation common to the profession.

Thelasttwoyearsoftheprogramareprojectoriented.Studentstake projectlabsinwhichthey designandinventhardwareandsoftwareto meetspecifications.Manystudentsworkone-on-onewith professors. Classsizesforupperlevelelectivesrangefromassmallasfourstudents to as large as 25. Through area elective choices, students majoring in computer engineering may concentrate their studies in the areas of
digitalsystemsandcontrols,computerhardwareandarchitecture,artificialintelligence, graphics,orsystemsprogramming.Inadditiontothe designlabsthatarerequired,mostcoursesatthejuniorandseniorlevel havesemester-longprojectsaspartofthehomeworkfortheclass.Many projects require teamwork. During the senior year, every computer engineeringstudentis requiredtocompleteayear-longseniordesign project that is often industrially sponsored. During the first semester, thestudentwritesaproposalanddoesapreliminarydesign.Thisdesign is subject to a design review process and a formal presentation of the ideasandconceptsisrequired.Duringthesecondsemester,thestudent completes the design and constructs the final product.

## Software Engineering

The software engineering curriculum focuses on all aspects of the craft of software development. Software Engineering students arepreparedtoenterthesoftwareindustryasdevelopersanddesigners of software systems of all sizes. Students complete a set of core requirements in the first two years of the program, providing a firm foundationinmathematics, naturalscience,basic programminganalysis and design, and an appreciation for the humanities and social sciences.Thetechnical partofthefirsttwoyears providesinstruction in programmingusinglanguages such as $\mathrm{C}, \mathrm{C}++$, and Java, basic data structures and algorithms, and object-oriented design.

The last two years of the program emphasize the design and implementation of computer software systems with a particular emphasisonthedesignandmanagementoflargeprojectsrequiring multiple developers to complete. Students will work on group software projects for real clients from the community. Class sizes for upper-levelelectives rangefromassmallasfourstudentstoaslargeas 25.Throughelectivechoices,studentsmajoringinsoftwareengineering may concentrate their studies in the areas of graphics, artificial intelligence,largesoftwaresystems and parallel programming.Many coursesatthejuniorand seniorlevelhave significant projectsas part ofthehomeworkfortheclass.Duringthe senioryear, every software engineeringstudentis requiredtocompleteayear-longseniordesign projectthatisoftenindustrially-sponsored.Duringthefirstsemester, the student writes a proposal and does a preliminary design. This designissubjecttoadesignreviewprocess,andaformal presentation oftheideasandconceptsis required. Duringthesecondsemester, the student completes the design and constructs the final product.

Thesoftwareengineering programallowssufficientfreeelectives for students to minor easily in a field of application such as business or in a complementary field such as a foreign language.

## Computer Science

Thecomputersciencecurriculumpreparesstudentsforallareas of the computer industry, for industrial positions wherecomputers are applied, and for further study in graduate programs. Computer sciencestudentscompleteasetofcorerequirementsinthefirsttwoyears ofthe program, providing afirmfoundation in mathematics, natural science,basic programminganalysis anddesign,andanappreciation for the humanities and social sciences. Thetechnical part of the first twoyearsprovidesinstructionin programmingusinglanguagessuch as C, C++, and Java, basic data structures and algorithms, object-oriented design, and basic machine organization.

The last two years of the program emphasize the design and implementationofcomputersoftwaresystems,andthescientificand industrialapplicationsofcomputerscience.Manystudentsworkone-on-onewithprofessors.Classsizesforupper-levelelectivesrangefrom as small as four students to as large as 25 . Through elective choices, studentsmajoringincomputersciencemayconcentratetheirstudies intheareas ofgraphics,artificialintelligence,systems programming,
or Internet applications. Many courses at the junior and senior level havesignificant projectsaspartofthehomeworkfortheclass.During thesenioryear,everycomputersciencestudentisrequiredtocomplete ayear-longseniordesignprojectthatisoftenindustrially sponsored. Duringthefirstsemester, thestudentwritesaproposalanddoesapreliminarydesign.This designis subjecttoadesign reviewprocess,and a formal presentation of the ideas and concepts is required. During thesecondsemester,thestudentcompletesthedesignandconstructs the final product.

In addition, the computer science program allows sufficient free electives for students to minor easily in a field of application such as business or in a complementary field such as a foreign language.

Computer Science Minor (21 hours)
Studentswithnopriorbackgroundin programmingareencouraged totakeComputerScience 101 or 105 beforetaking ComputerScience 210. Althoughtherearenomathematicscourses requiredforaminor in computer science, students should be aware that mathematical principlesfromcalculusanddiscretemathematicsareregularlyused throughout the computer science program.
Computer Science 210, 215, 220, 290; 9 hours of 300- or 400-level computer science courses

## Bachelor of Science in

## ELECTRICAL ENGINEERING

2019-2020 | 129 Hours Required

Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- PHYS 210: Calculus Physics I (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- EE 495:Senior Project Phase I

Overlay: Writing Across the Curriculum (4 courses)

- FYS 112: First Year Seminar (3 hrs)
- EE 495: Senior Project Phase I (3 hrs)
- EE 497: Senior Project Phase II (3 hrs)

Major Requirements (74 hrs)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 324: Differential Equations (3 hrs)
PHYS 211: Calculus Physics II (4 hrs)
ENGR 101: Introduction to Engineering (3 hrs) OR
ENGR 102 (if English is second language)
ENGR 123: Programming for Engineers (3 hrs) or CS 210
ENGR 212: Statics (3 hrs)
EE 210: Circuits (3 hrs)
EE 215: Circuits \& Systems (3 hrs)
EE 224: Electrical Engineering Programming Lab (2 hrs)
EE 254: Logic Design (3 hrs)
EE 310: Linear Systems \& DSP I (3 hrs)
EE 311: Linear Systems \& DSP II (3 hrs)
EE 320: Engineering Electromagnetics (3 hrs)
EE 342: Electronics I (3 hrs)
EE 343: Electronics II (3 hrs)
EE 354: Digital Systems (3 hrs)
EE 360: Linear Control Systems (3 hrs)
EE 380: Intermediate Electrical Projects Lab (2 hrs)
EE 421: Photonics I (3 hrs)
EE 430: Energy Conversion Systems (3 hrs)
EE 454: Microcontroller Applications (3 hrs)
EE 470: Analog Communication Theory (3 hrs)
EE 471: Digital Communication Theory (3 hrs)
EE 494: Senior Project Seminar (0 hrs)
EE 497: Senior Project Phase II (3 hrs)
Technical Electives (12 hours)

- One course from: EE 390 or MATH 365
- One course from: PHYS 213, 305; MATH 341, 370, 425
- Two courses from: ENGR: 366 CS: 215, 320, 355, 375, 380, 415, 430, 475, 480
EE: 330, 356, 410, 422, 425, 432, 437, 438, 440, 445, 458, 465, 499
ME: 342, 344, 362, 368; PHYS 312, 330, 331, 416, 421, 427, 471

39 Hours of 300/400 level courses

## NOTES

- All Electrical Engineering majors must take 32 hours of math and science to meet ABET requirements.
- Students must have a minimum GPA of 2.0 in all College of Engineering and Computer Science courses (CE, CS, EE, ENGR, and ME ).


## Bachelor of Science in

## ELECTRICAL ENGINEERING: BIOMEDICAL

2019-2020 | 138 Hours Required

Enduring Foundations General Education Requirements
(43 hours)
Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- PHYS 210: Calculus Physics I (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- EE 495: Senior Project Phase I (Senior project must be biology-related)
Overlay: Writing Across the Curriculum (4 courses)
- FYS 112: First Year Seminar (3 hrs)
- EE 495: Senior Project Phase I (3 hrs)
- EE 497: Senior Project Phase II (3 hrs)
- 


Major Requirements (89 hrs)
Lower Division Requirements (53 Hours)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4hrs)
MATH 324: Differential Equations (3 hrs)
PHYS 211: Calculus Physics II (4 hrs)
ENGR 101: Intro to Engineering (3 hrs)
ENGR 123: Programming for Engineers (or CS 210) (3 hrs)
ENGR 212: Statics (3 hrs)
EE 210: Circuits (3 hrs)
EE 215: Circuits \& Systems (3 hrs)
EE 224: Electrical Engineering Programming Lab (2 hrs)
254: Logic Design (3 hrs)
BIOL 112: Human Anatomy/Physiology I (4 hrs)
BIOL 113: Human Anatomy/Physiology I (4 hrs)
BIOL elective (3 hrs)
Upper Division Requirements (36 Hours)
EE 310: Linear Systems \& DSP I (3 hrs)
EE 311: Linear Systems \& DSP II (3 hrs)
EE 320: Engineering Electromagnetics (3 hrs)
EE 342: Electronics I (3 hrs)
EE 343: Electronics II (3 hrs)
EE 360: Linear Control Systems (3 hrs)
EE 380: Intermediate Electrical Projects Lab (2 hrs)
EE 421: Photonics I (3 hrs)
EE 470: Analog Communication Theory (3 hrs)
EE 494: Senior Project Seminar (0 hrs)
EE 497: Senior Project Phase 2 (3 hrs)
chnical Electives ( 6 hours)
430, 475, 480; EE 330, 356, 410, 422, 425, 432, 437, 438,
440, 445, 458, 465, 499; ENGR 366; ME 342, 344, 462, 468;
PHYS 305, 312, 330, 331, 416, 421, 427, 471
OTES
All Electrical Engineering majors must take 32 hours of math
and science to meet ABET requirements.
offered by the College of Engineering and Computer Science
(courses prefixed CE, CS, EE, ENGR, and ME).

## Bachelor of Science in

## COMPUTER ENGINEERING

2019-2020 | 135 Hours Required

Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- PHYS 210: Calculus Physics I (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- EE 495: Senior Project Phase I

Overlay: Writing Across the Curriculum (4 courses)

- FYS 112: First Year Seminar (3 hrs)
- EE 495: Senior Project Phase I (3 hrs)
- EE 497: Senior Project Phase II (3 hrs)

Major Requirements (92 hrs)
CS 210: Fundamentals of Programming I (3 hrs)
CS 215: Fundamentals of Programming II (3 hrs)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 324: Differential Equations (3 hrs)
MATH 370: Discreet \& Combinatorial Mathematics (3 hrs)
PHYS 211: Calculus Physics II (4 hrs)
ENGR 101: Intro to Engineering (3 hrs)
ENGR 390: Applied Engineering Mathematics (3 hrs)
EE 210: Circuits (3 hrs)
EE 215: Circuits \& Systems (3 hrs)
EE 254: Logic Design (3 hrs)
CS 290: Object Oriented Programming(3 hrs)
CS 315: Algorithms \& Data Structures (3 hrs)
CS 320: Computer Architecture (3 hrs)
CS 470: Operating Systems (3 hrs)
CS 475: Networks (3 hrs)
EE 310: Linear Systems \& DSP I (3 hrs)
EE 342: Electronics I (3 hrs)
EE 354: Digital Systems (3 hrs)
EE 356: Small Computer Software (3 hrs)
EE 360: Linear Control Systems (3 hrs)
EE 380: Intermediate Electrical Projects Lab (2 hrs)
EE 454: Microcontroller Applications (3 hrs)
EE 458: Embedded Systems \& Real-time Programming (3 hrs)
EE 494: Senior Project Seminar (0 hrs)
EE 497: Senior Project Phase 2 (3 hrs)

EE/CS Elective
Choose from the following courses:
EE 311, 343 or CS 380
Technical Electives
Choose 9 hours from the following courses:
350, 355, 375, 381, 390, 415, 430, 455, 473, 499
EE 311, 343, 410, 456, 499
Courses must be chosen with the approval of CS advisor.
39 Hours of 300/400 level courses

NOTES

- All Computer Engineering majors must take 32 hours of math and science to meet ABET requirements.
- Students must have a minimum GPA of 2.0 in all College of Engineering and Computer Science courses (CE, CS, EE, ENGR, and ME).


## Bachelor of Science in

## SOFTWARE ENGINEERING

2019-2020 | 130 Hours Required

## Enduring Foundations General Education Requirements (43 hours) <br> Outcome 1: (3 hrs) Critical Reading and Thinking <br> - FYS 112 or 312 First Year Seminar <br> Outcome 2: (3 hrs) Imaginative Expressions of Human Condition

 .Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs) OR BIOL 107: General Biology (4 hrs)
- PHYS 210: Calculus Physics I (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
.
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
.
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- CS 495: Senior Project Phase I

Overlay: Writing Across the Curriculum (4 courses)

- FYS 112: First Year Seminar (3 hrs)
- CS 495: Senior Project Phase I (3 hrs)
- CS 497: Senior Project Phase II (3 hrs)

Major Requirements ( 69 hrs )
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 370: Discreet \& Combinatorial Mathematics (3 hrs)

Choose one course from:
ENGR 390: Applied Engineering Mathematics (3 hrs)
MATH 365: Probability (3 hrs)
MATH 341: Linear Algebra (3 hrs)
Science Sequence:
If you took CHEM 118, take one of the following:
PHYS 211: Calculus Physics II (4 hrs) or
CHEM 240: Organic Chemistry (4 hrs) or
CHEM 280: Inorganic Chemistry I (4 hrs)
If you took BIOL 107, take one of the following:
PHYS 211: Calculus Physics II (4 hrs) or
BIOL 119: Intro to Biology: Molecular Perspectives (4 hrs)
BIOL 120: Intro to Biology: Oganismal Diversity (4 hrs)
CS 101: Introduction to Computer Science (3 hrs)
CS 210: Fundamentals of Programming I (3 hrs)
CS 215: Fundamentals of Programming II (3 hrs)
CS 290: Object-Oriented Design (3 hrs)
CS 315: Algorithms \& Data Structures (3 hrs)
CS 380: Programming Languages (3 hrs)
CS 390: Software Engineering (3 hrs)
CS 391: Software Engineering II (3 hrs)
CS 395: Software Project Management (3 hrs)
CS 413: Software Security (3 hrs)
CS 470: Operating Systems (3 hrs)
CS 491: Software Quality Assurance (3 hrs)
CS 494: Senior Project Seminar (0 hrs)
CS 497: Senior Project Phase II (3 hrs)
Technical Electives
Complete 12 credits from: CS $320,350,355,375,376,381,415$,
$430,440,445,455,472,473,475,478,499$; EE 354, 454, 456.
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Free Electives (18 hours)
At least 9 hours must be 300 level or higher. Courses numbered MATH 202 or lower, PHYS 1XX, CHEM 10X, CS 105 or 205, and English language courses may not be use as free electives.
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-
-

39 Hours of 300/400 level courses

## Bachelor of Science in

## COMPUTER SCIENCE

2019-2020 | 130 Hours Required

Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -
Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs) OR BIOL 107: General Biology (4 hrs)
- PHYS 210: Calculus Physics I (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- CS 495: Senior Project Phase I

Overlay: Writing Across the Curriculum (4 courses)

- FYS 112: First Year Seminar (3 hrs)
- CS 495: Senior Project Phase I (3 hrs)
- CS 497: Senior Project Phase II (3 hrs)
- 

Major Requirements ( 69 hrs )
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 370: Discreet \& Combinatorial Mathematics (3 hrs)
One course from:
ENGR 390: Applied Engineering Mathematics (3 hrs)
MATH 365: Probability (3 hrs)
MATH 341: Linear Algebra (3 hrs)
Science Sequence:
If you took CHEM 118, take one of the following:
PHYS 211: Calculus Physics II (4 hrs) or
CHEM 240: Organic Chemistry (4 hrs) or
CHEM 280: Inorganic Chemistry I (4 hrs)
If you took BIOL 107, take one of the following:
PHYS 211: Calculus Physics II (4 hrs) or
BIOL 119: Intro to Biology: Molecular Perspectives (4 hrs)
BIOL 120: Intro to Biology: Oganismal Diversity (4 hrs)

CS 101: Introduction to Computer Science (3 hrs)
CS 210: Fundamentals of Programming I (3 hrs)
CS 215: Fundamentals of Programming II (3 hrs)
CS 220: Logic Design \& Machine Organization (3 hrs)
CS 290: Object-Oriented Design (3 hrs)
CS 315: Algorithms \& Data Structures (3 hrs)
CS 320: Computer Architecture (3 hrs)
CS 380: Programming Languages (3 hrs)
CS 381: Formal Languages (3 hrs)
CS 390: Software Engineering (3 hrs)
CS 470: Operating Systems (3 hrs)
CS 494: Senior Project Seminar (0 hrs)
CS 497: Senior Project Phase II (3 hrs)
Technical Electives
Complete 12 hours from: CS: 350, 355, 375, 376, 391, 395, 413, $415,440,445,455,472,473,478,491,499$ EE 354, 454, 456

Professional Development Elective
Complete 3 hours from the following:
ECON 101; COMM 210, 382, 485; PHIL 111, 121, 231, 241, 316,
317; WRTG 330 (when the topic is technical writing).

Free Electives (18 hours)
Complete at least 9 hours must be 300 level or higher. Courses num-
bered MATH 202 or lower, PHYS 1XX, CHEM 10X, CS 105 or
205, and English language courses may not be use as free electives.
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39 Hours of 300/400 level courses

# Mechanical and Civil Engineering 

Faculty: Allen, Layer, Fulcher (Mechanical Engineering Program Director), Lofton, Schmidt, Immanuel (Chair), Stamps, Swenty, Unger

# Bachelor of Science in Civil Engineering 

Bachelor of Science in Mechanical Engineering

Bachelor of Science in Mechanical Engineering: Biomedical

TheDepartment of Mechanical and CivilEngineering offers programs leading to the degrees of Bachelor of Science in Civil Engineering and Bachelor of Science in Mechanical Engineering. Both programs are accredited by the Engineering Accreditation Commission (EAC) of ABET, www.abet. org.Thedepartmentalsoofferscoursesinsupportoftheengineeringmanagementminorandacertificateinenergyengineering.Abiomedicaloptionisavailabletomechanicalengineeringmajors.The recommendedco-opoptionhascourserequirementsidenticaltothoselistedinthissection;however, studentsfollowamodifiedcourseschedule.PleaserefertoSpecialEducationalOpportunitieslocated in the "Degrees, Curriculum, Academic Opportunities" section of this catalog.

StudentsdesiringtostudyatHarlaxtonCollegefollowamodifiedcoursescheduleandshould consult their academic advisor.

## Civil Engineering

Civilengineeringis a professionfocused ondesigning, building, andmaintaininginfrastructurethatimprovesthequality ofliving while protecting public safety.Community, societal, and environmental needs aremet through the planning, design, construction, and maintenance of public and private facilities. Civil engineers apply their technical knowledge and skills to diverse projectsincludingbuildings,foundations,dams,highways,tunnels,bridges,airports,harbors,flood protectionfacilities, waterandwastewatertreatmentplants,andoff-shorestructures.Civilengineering careeropportunitiesexistinindustry,government,andtheprivatesector.Practiceareasincludedesign, construction, project management, consulting, research, and teaching.

Thecivilengineeringundergraduateprogramisdesignedtoprovidestudentswithapersonalized educational experience. Program educational objectives are:

- Graduates will be actively engaged in a professional career as a civil engineer or pursuing advanced study
- Graduates will understand professional practice issues and demonstrate a commitment to professional licensure and continuing education
- Graduates, guidedbytheprinciplesofsustainabledevelopmentandglobalinterconnectedness, will understand how civil engineering projects affect society and the environment
Thecivilengineeringcurriculumpreparesstudentstomeetpresentandfuturechallengesin the professionandtodevelopinsightintoeconomical, physical, social, and political constraints affectingtheengineeringdecision-makingprocess.Today'sengineersmustbeadeptatworkingin aglobalmarketplace.Toassistengineers in meeting thatchallenge,theUniversity ofEvansville provides students with an opportunity for an international experience at Harlaxton College.A student chapter of the American Society of Civil Engineers (ASCE) is sponsored by the department to supportand encourage professional development.UE's award-winning ASCE chapter has been recognized as one of the best in the nation. Students may also participate in Chi EpsiIon(thenational civilengineering honor society) and the college-widechapter ofthe Society of Women Engineers.

Tobepreparedtomeetpresentandfuturechallengesintheprofession,studentsfollowacurriculumthatprovidesthemwithabroadbodyofknowledgeandacomprehensiveunderstanding of civilengineering fundamentals. This is achieved through a set of required core courses in the areasofmaterials,structuralengineering,waterresourcesengineering,geotechnicalengineering, transportationengineering, constructionengineering,surveying, andenvironmentalengineering. In addition, the curriculum provides options for students to take upper-division elective courses in structuralanalysis,advancedstructuraldesign,engineeringeconomics,engineeringhydrology,environmentalengineering,advancedpavementdesignandmanagement,andspecialtopicssuchasearth dams, open channel hydraulics, and advanced computer visualization and modeling.

Students are introduced to engineering design in the fall of their freshman year in Engineering 101. The freshmen in this course closely interact with a faculty member who is also the student'sadvisor.Pastfreshman projectsincludethedesignofbalsawoodbridgesandretaining walls. Upperclassmen interact with freshmen as course assistants.

Afterstudentsgainanunderstandingoffundamentalconcepts,designeducationiscontinued during the junioryear through a variety ofdesign projects such as a steel frame walkway in Civil Engineering 341 and a concrete baseball bat in Civil Engineering 331. Design is heavily emphasized in senior-level civil engineering required and elective courses and is
developed through the use of both individual projects and design teams.Studentsutilize computersoftwareinseveraldesignexercises: slope stability software in Civil Engineering 438; structural analysis softwaretodesignreinforcedconcretestructuresinCivilEngineering 342;hydraulic engineering software to design spillways and bridges in Civil Engineering 469, and rainfall-runoff modeling software to design sustainable, environmentally compliant storm water management facilities in Civil Engineering 468. The design projects becomeprogressivelymorecomplexleadinguptotheyear-longsenior capstonedesign project in Civil Engineering 495/497. Studentswork onmultifacetedprojects,suchasdams,bridges,buildings,roadways, trails, storm water management facilities, athletic complexes, and green infrastructure. In order to obtain a broad design experience andexposuretopracticaldesigncriteria,studentsinteractwithdesign professionals, basetheirdesignsonnationalandinternationalbuilding codesandstandards,prepareengineeringreportsanddesigndrawings, makepresentationsatconferences, and prepareapplicationsforlocal, state, and federal permits at the completion of the senior project.

Aftercompletingthecivilengineering curriculum,studentshave 34 credithoursinbasicmathematics andscienceandapproximately 72 credithoursinengineeringtopics, dependingonelectiveschosen in the senior year. The engineering topics are divided into approximately two-thirds engineering science and one-third engineering design. Theallocationbetweenengineeringscienceanddesignpreparescivilengineeringgraduatestoenterthepracticeofengineering or to further their education in graduate school.

## Mechanical Engineering

Mechanicalengineering is one ofthebroadestfields ofengineering,encompassingapplicationsasdiverseasautomotiveoraerospace vehicles, powergeneration,manufacturingprocesses,plasticandother petrochemical products,andelectronichardware.Theseapplications requireafundamentalunderstanding ofthestaticanddynamicrelationshipsbetweenforcesandmotion, thenatureofmaterials, principlesofenergyconservation,andtransformation,design,andanalyses of machines, the transmission of heat, and the flow of fluids. The mechanical engineering curriculum provides a rigorous treatment of fundamental principles in these subject areas and the necessary backgroundinmathematicsandthebasicsciencestopreparestudents forthesecourses.Throughelectivechoices,studentsmayinvestigate special areas ofmechanical engineering including internal combustionengines,combustionengineering,turbomachinery,powerplants, finiteelements, mechanicalvibrations, andadvancedcomputational methods.

In addition to strong technical skills, today's engineers in the globalmarketplacemustbeadeptatworkingwithotherpeoplewho have very different professional backgrounds and who may befrom other countries with different cultures. The University of Evansville helps engineers meet that challenge by providing students with a strong liberal arts background and providing an opportunity for an international experience at Harlaxton College.

Themission ofthemechanicalengineering programisto provide a personalized educational experience for talented and motivated students whoseeka Bachelor of ScienceinMechanical Engineering. Program educational objectives include:

- Graduatesshallbeengagedinprofessional practice,continuing education, and/or other activities benefitting society.
- Graduatesshallhavedevelopedhabitsconsistentwithanattitude ofprofessionalism, anawareness andappreciationfordifferent cultures, and the understanding of engineering influence in a global context.

Themechanicalengineering programstrivestomaintainabalance between a traditional approach to teaching engineering principles andincorporating currentindustrial practices.Forexample,comput-er-aided design and analysis, applications of automatic data acquisition, and concurrentengineering haveallbeen incorporatedintothe curriculum. Programfacultyaggressivelyseektodeveloplaboratories and courses that use state-of-the-art equipment. The size of the programallowsstudentstodefineindividualexperiencesinundergraduate researchorprojectsinstudentsectionsofprofessional societies.Student chapters of the American Society of Mechanical Engineers (ASME) and theSocietyofAutomotiveEngineers(SAE)aresponsored bythedepartmenttosupportandencouragethestudents'professionaldevelopment. A national honor society for mechanical engineering students, Pi Tau Sigma,isrepresented.Studentsmayalsoparticipateinthecollege-wide chapter of the Society of Women Engineers (SWE).

A unique and exciting integrated design sequence is offered to freshman through senior students. Students from different grade levelsworktogetheronengineering projects.Students apply design skills obtained in their course work and throughout the integrated design sequence directly to meaningful projects. The goal is to teach bothtechnicalandnon-technicalskillsthroughcollaborative"design, build, and test" projects.

The integrated design sequence consists of courses numbered Mechanical Engineering 197, 297, 397, and 497 that offer specific skills that will beused in theteamenvironment.Thefreshmancourse, Mechanical Engineering 197, provides skills in computer-aidedmodeling,sketchingand productfabricationtechniques. Thesophomore course, Mechanical Engineering 297, provides instruction in basic computer-controlledmachiningandrapidprototypingtechniquesand further instruction in computer-aided modeling. The junior course, Mechanical Engineering 397, provides skills in instrumentation and automatic data acquisition for measurements. The senior course, Mechanical Engineering 497, provides skills in project management.

Afterstudentsgainanunderstandingoffundamentalconcepts,design education is continued during the junior year through assigned design projectsasapartofnormalcoursework.Thedesignprojectsareprogres-sivelymorecomplexuptotheseniorcapstonedesignexperience,Mechanical Engineering 495 and 497.There are many differenttypes of projects including industrially sponsored projects,such astheSAEMiniBaja,Formula SAE cars, and a human-powered lunar rover that are entered into nationalandregionalcompetitions,andundergraduateresearchprojects. Thisapproachpreparesourgraduatestoentertheprofessional practiceof mechanicalengineeringortofurthertheireducationingraduateschool.

## Lower Division Acceptance in Mechanical Engineering

Lowerdivisionacceptanceintothemechanical engineering program requires that degree-seeking students meet the University's admissionrequirementsandthemechanicalengineering program's requirements.Programlowerdivisionacceptanceisrequiredbeforea student is permitted to participate in any 100 - or 200 -level mechanical engineering course. A limited number of students are accepted into the program as lower division status to ensure a high quality, personalized,educational experience.Themechanicalengineering program's requirements are established to provide the best background for the program's curriculum. The requirements focus on appropriate preparation for the program such as prior course work, GPA, and minimum standardized test scores. Minimum high school preparationforlowerdivisionadmissionmustincludethefollowing:

- Three-and-one-halfyearsofmathematicswithanaveragegrade ofBcomprised ofalgebra, planegeometry,trigonometry, pre-calculus, and/or calculus
- Twoyearsofsciencewith anaveragegradeofBincludingatleast one year of chemistry with a laboratory
- SAT-I (MATH only) score of 560 or higher; SAT-R (MATH only) score of 580 or higher; or an ACT (MATH only) score of 26 or higher
- Four years of English

Applicants whose native language is not English must achieve a minimum TOEFL score of 550 (PBT), 79 (IBT), or 213 (CBT), or a minimum IELTS score of 6.5 . As an alternate language consideration, a SAT-R (Reading and Writing) minimum score of 560 or an ACT (English) minimum score of 23 may be submitted in lieu of the TOEFL/IELTS requirementsbystudentswhosenativelanguage is not English.

Ifprogram spacepermits,aninterviewbetweenanapplicantand afacultymembermaybeconsideredintheadmission process;other evidence of exceptional motivation may be considered in marginal cases. Enrolled university students that do not meet the above math and/or English language standards may apply for mechanical engineeringlowerdivision, ifprogram spacepermits, oncethefollowing university preparations have been demonstrated:

- Completion of MATH 105 with a grade of B or better; or completion of MATH 221 with a grade of C- or better
- Completion ofalluniversity requiredEnglishLanguagecourses (EL 102, 103, 106, 107, 110, and/or 111) with a grade of B or better
Admissiontofull candidacystatus inthemechanical engineering programisobtainedthroughthesuccessfulupperdivisionapplication process.
Upper Division Admission in Mechanical Engineering
Students pursuing the Bachelor of Science in Mechanical Engineering (BSME) must be admitted to upper division by the mechanical engineering program faculty before they are permitted to participate inany 300 -or 400 -levelmechanicalengineeringcourses. Application for upper-division admission is normally made at the beginning of the fourth semester offull-time study. The application process consists of submitting an application form for review by the mechanical engineering faculty prior to the review period, which is the third week in the semester. To meet the requirements for admission to upper division, students must have met the following requirements:
- Completion of 60 credit hours with a minimum GPA of 2.5.
- Completion ofthefollowing courses with agrade ofC-orbetter: Chemistry 118; Engineering 212, 213, 232; First-Year Seminar 112; Mathematics 221, 222, 323, 324; Mechanical Engineering 101/102, 197, 297; Physics 210.

Followingthereviewperiod,conditionalacceptancewillbegranted tostudentswhohavesuccessfullycompletedtherequirementsorwho willcompletethembytheendofthesemester.Conditionalacceptance allowsthestudenttopreregisterfor300-levelmechanicalengineering coursesforthe upcoming semester. Enrollmentin 300-leveland 400levelmechanicalengineering courses requiresfulfillmentofallrequirements.Studentsarenotified oftheirfullacceptancestatuswithinfour weeks following the end of the semester in which they apply.

Transferstudentsmustalsoapplyforadmissiontoupperdivision. Transfer students may request a one or two semester probationary periodinordertomeettheupperdivision requirementslistedabove. Therequestmustbemadeinwriting, andsubmittednolaterthanthe end of the first week in the semester.

Biomedical Option in Mechanical Engineering
Mechanical engineering majors may earn a bachelor's degree in mechanical engineering with a biomedical option. With careful curriculumplanning,mechanicalengineeringstudentscancompletethe biomedical option with no additional classes.

## Bachelor of Science in

## CIVIL ENGINEERING

2019-2020 | 132 Hours Required

Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity
-
Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- PHYS 210: Calculus Physics (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- CE 495: Design Project I (3 hrs)

Overlay: Writing Across the Curriculum (4 courses)

- FYS 112: First Year Seminar (3 hrs)
- CE 374: Environmental Engineering I (3 hrs)
- CE 380: Hydraulics Lab (3 hrs)
- CE 495: Design Project (3 hrs)

Major Requirements (77 hrs)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 324: Differential Equations (3 hrs)
PHYS 211: Calculus Physics II (4 hrs)
CHEM 240 or CHEM 280 may be substituted for PHYS 211
w/advisor approval
ENGR 101: Intro to Engineering (3 hrs)
ENGR 212: Statics (3 hrs)
ENGR 213: Dynamics (3 hrs)
ENGR 232: Mechanics of Materials (3 hrs)
ENGR 366: Fluid Mechanics (3 hrs)
ENGR 390: Applied Engineering Math (3 hrs)
CE 183: Surveying (3 hrs)
CE 324: Construction Management (3 hrs)
CE 331: Construction Materials (3 hrs)
CE 338: Soil Mechanics \& Soil Behavior (3 hrs)
CE 339: Soil Mechanics Lab (1 hr)
CE 340: Structural Analysis (3 hrs)
CE 341: Design of Steel Structures (3 hrs)
CE 342: Design of Concrete Structures (3 hrs)
CE 350: Transportation Engineering (3 hrs)
CE 374: Environmental Engineering I (3 hrs)
CE 380: Hydraulics Lab (1 hr)
CE 438: Geotechnical Engineering (3 hrs)
CE 469: Design of Hydraulic Structures (3 hrs)
CE 497: CE Design Project II (3 hrs)
Science Elective (1 course)
BIOL 100, 107, 110, 112, 201; ES 103, 360; or GEOL 130
Engineering Elective ( 1 course)
ENGR 123, ENGR 230, EE 210, ME 362, or CS 210
Technical Electives (6 hours)
Completetwotechnicalelectives; atleastonetechnicalelectivemust
be a 400-level CE course.
CE 443, 449, 450 468, 475, 498, 499; ENGR 409; ME 432, 434, $446,448,463$, or 466 ;

Free Electives (6 hours)
Courses numbered MATH 202 or lower, Physics 1XX, CHEM 10X, software application courses, and EnglishLanguage courses may not be applied to free or technical electives.
39 HOURS OF 300/400 LEVEL COURSES
NOTES

- All Civil Engineering majors must take 32 hours of math and science to meet $A B E T$ requirements.
- Students must have a minimum GPA of 2.0 in all College of Engineering and Computer Science courses (CE, CS, EE, ENGR, and ME)


## Bachelor of Science in

## MECHANICAL ENGINEERING

2019-2020 | 133 Hours Required

Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-
Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221 ( 4 hrs )

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- PHYS 210: Calculus Physics I (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- ME: 495: Professional Practice I (3 hrs)

Overlay: Writing Across the Curriculum (4 courses)

- FYS 112: First Year Seminar (3 hrs)
- ME 330: Materials Lab (2 hrs)
- ME 360: Thermo/Fluid Dynamics Lab (2 hrs)

Major Requirements (78 hrs)
EE 210: Circuits (3 hrs)
EE 215: Circuits \& Systems (3 hrs)
ENGR 212: Statics (3 hrs)
ENGR 213: Dynamics (3 hrs)
ENGR 230: Materials Science (3 hrs)
ENGR 232: Mechanics of Materials (3 hrs)
ENGR 352: Numerical Methods (3 hrs)
ENGR 366: Fluid Mechanics (3 hrs)
ENGR 390: Applied Engineering Mathematics (3 hrs)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 324: Differential Equations (3 hrs)
ME 101: Introduction to Mechanical Engineering (3 hrs) or
ME 102 (if English is second language)
ME 197: Integrated Design I (2 hrs)
ME 297: Integrated Design II (2 hrs)
ME 318: Manufacturing Methods (3 hrs)
ME 330: Materials Lab (2 hrs)
ME 344: Design of Machine Elements (3 hrs)
ME 345: Computer Aided Mechanical Design (3 hrs)
ME 360: Thermo/Fluid Dynamics Lab (2 hrs)
ME 362: Thermodynamics (4 hrs)
ME 368: Heat Transfer (3 hrs)
ME 397: Integrated Design III (3 hrs)
ME 452: System Modeling \& Control (3 hrs)
ME 497: Professional Practice II (3 hrs)
PHYS 211: Calculus Physics II (4 hrs)
Technical Electives (9 hours)
Choose one from: ME 432, 434, 446, 448, or 453
Choose one from: ME 462, 463, 466, 468, 470, 472, 473, or 476
Choose one from: ME, CE, CS, EE, ENGR, MATH, PHYS, BIOL, or CHEM (except MATH 202 or lower, PHYS 100 level, and CHEM 10x courses)
Free Electives (3 hours)
Courses numbered MATH 202 or lower, Physics 1XX, CHEM 10X, softwareapplicationcourses, andEnglishLanguagecoursesmaynot be applied to free or technical electives.
39 Hours of 300/400 level courses

NOTES

- All Mechanical Engineering majors musttake 32 hours of math and science to meet ABET requirements.
- Students must have a minimum GPA of 2.0 in all College of Engineering and Computer Science courses (CE, CS, EE, ENGR, and ME).


## Bachelor of Science in

## MECHANICAL ENGINEERING: BIOMEDICAL

2019-2020 | 136 Hours Required

Enduring Foundations General Education Requirements (43 hours)

Outcome 1: (3 hrs) Critical Reading and Thinking

- FYS 112 or 312 First Year Seminar

Outcome 2: (3 hrs) Imaginative Expressions of Human Condition -

Outcome 3: (3 hrs) Human History and Historical Context of Knowledge

Outcome 4: (3 hrs) Fundamental Beliefs: Human Identity, Core Values, Place

Outcome 5: (3 hrs) Human Aesthetic Creation and Artistic Creativity

Outcome 6: (6 hrs) Linguistic and Cultural Competence in Language
-

Outcome 7: (3 hrs) Quantitative Literacy

- MATH 221: Calculus I (4 hrs)

Outcome 8: (7 hrs with at least one lab course) Scientific Literacy

- CHEM 118: Principles of Chemistry (4 hrs)
- PHYS 210: Calculus Physics (4 hrs)

Outcome 9: (6 hrs) Core Concepts: Society, Human Behavior, Civic Knowledge
-
-
Outcome 10: (1 hr) Knowledge and Responsibility Health and Wellness
-
Outcome 11: (3 hrs) Think Critically \& Communicate Orally \& in Writing

- ME 495: Senior Project Phase I (3 hrs)

Overlay: Writing Across the Curriculum (4 courses)

- FYS 112: First Year Seminar (3 hrs)
- ME 330: Materials Lab (2 hrs)
- ME 360: Thermo/Fluid Dynamics Lab (2 hrs)

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Major Requirements (78 hrs)
EE 210: Circuits (3 hrs)
EE 215: Circuits & Systems (3 hrs)
ENGR 212: Statics (3 hrs)
ENGR 213: Dynamics (3 hrs)
ENGR 230: Materials Science (3 hrs)
ENGR 232: Mechanics of Materials (3 hrs)
ENGR 352: Numerical Methods (3 hrs)
ENGR 366: Fluid Mechanics (3 hrs)
ENGR 390: Applied Engineering Mathematics (3 hrs)
MATH 222: Calculus II (4 hrs)
MATH 323: Calculus III (4 hrs)
MATH 324: Differential Equations (3 hrs)
ME 101: Introduction to Mechanical Engineering (3 hrs) or
ME 102 (if English is second language)
ME 197: Integrated Design I (2 hrs)
ME 297: Integrated Design II (2 hrs)
ME 330: Materials Lab (2 hrs)
ME 344: Design of Machine Elements (3 hrs)
ME 345: Computer-Aided Mechanical Design (3 hrs)
ME 360: Thermo/Fluid Dynamics Lab (2 hrs)
ME 362: Thermodynamics (4 hrs)
ME 368: Heat Transfer (3 hrs)
ME 397: Integrated Design III (3 hrs)
ME 452: System Modeling & Control (3 hrs)
ME 497: Professional Practice II (3 hrs)*}\mathrm{ with biomedical focus
Biomedical Option (22 hours)
BIOL 107: General Biology (4 hrs)
CHEM 240: Organic Chemistry I (4 hrs)
EXSS 112: Human Anatomy and Physiology I (4 hrs)
EXSS 112: Human Anatomy and Physiology II (4 hrs)
Complete one of the following:
EXSS 356: Biomechanics (3 hrs)
ME 424: Engineering Biomechanics (3)
Complete one of the following:
BIOL 305: Microbial Ecology (3 hrs)
BIOL 322: Biological Physics (3 hrs)
CHEM 370: Biochemistry (3 hrs)
ME 428: Special Topics in Biomedical Engineering (3 hrs)
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39 Hours of 300/400 level courses
NOTES
- All Mechanical Engineering majors must take 32 hours of math
and science to meet ABET requirements.
- Students must have a minimum GPA of 2.0 in all College
of Engineering and Computer Science courses (CE, CS, EE,
ENGR, and ME).

# Harlaxton College 

Gerald Seaman, Principal

Harlaxton College, housed in a 100 room English Manor, is a home for living, learning, personalgrowthanddevelopmentandtravel. Harlaxtonhassemesterprogramseachfallandspring anda5weeksummerprogramfromlateMayuntiltheendofJune.Eachoftheseprogramsdraws students from the University of Evansville as well as from partner institutions throughout the United States and Internationally.

## Course Offerings

Duringthesemester program,studentstakeasix-creditcoursetitledTheBritishExperience from the Celts to the Present Day. This is an interdisciplinary course taught by a team of British professors. This course is available at 200 and 300 level and may also be taken for honors credit.

Around this core, students take traditional courses offered by visiting American professors from the University of Evansville and our partner universities and colleges. Courses are determined two years in advance and are available online at www.harlaxton.evansville.edu. Most students, withsomeadvanceplanning,canspendasemesteratHarlaxtonandstillcompletetheir course work in normal time frames.

## Travel Programs

Travel is organized in many different ways for Harlaxton students. Students can take advantage of local cultural trips and British Studies field trips, which are built into the price of the program. Thesetripsareorganized byHarlaxtonandavailabletostudentstoexploremorelocal andregionalofferings. Thesetripstakeplaceeachsemesterandstudentswillreceiveinformation on their locations and dates in their Harlaxton orientation.

Students are also encouraged to travel throughout Europe and the UK. This can be done through College Sponsored travel. Each semester Harlaxton will offer a travel package for students to purchase. These options include destinations in Europe such as Paris, Barcelona, and Rome. Students also have options in the UK such as London, Edinburgh, and the Lake District. These trips can be booked before traveling abroad and help the student create a wide ranging travel experience. Should students choose to travel independently while at Harlaxton, there is supportfromourStudentDevelopmentOfficeaswellasaweekendcheckoutmandateforsafety and security.

## Student Development

A full range of student life programs and support systems are available for students at Harlaxton. Medical and counseling services are available within Harlaxton Manor itself. Student developmentstaffmembers coordinateallstudentactivitiesandlookafterstudentwell-being. Faculty members are close at hand - professors also live in Harlaxton Manor, eat meals in the refectorywithstudents,andthemselvesparticipateinchoir,sportsteams,church,thetalentshow, and campus life generally.

Students are also engaged in the local community through the Meet-a-Family Experience, sporting competitions, where teams formed at the Manor compete against local teams, and volunteer opportunities to help local community programs,.

Library
The Harlaxton library is open 24 hours a day, 7 days a week. The library maintains an excellentsmallcollection of 25,000 volumesinadditiontoonlineresources.Aninterlibraryloan relationship with the British Library can provide any book in print in the United Kingdom. The University of Evansville Libraries also assist the Harlaxton College Library, particularly through web-based journal subscriptions and also through special acquisitions.

## The Centre for British StudieS

TheUniversity's Harlaxton-basedfacultyisatrulyout-standingcollectionofteacher-scholars. Theirresearchinterestsarebroadandinterdisciplinaryandincludemedievalandmodernhistory, literature, art history, politics, and music. They take a close interest in the pedagogy of British Studies and interdisciplinary teaching.

Building on the model of interdisciplinary centers in British, American, and Continental universities, this faculty forms the Centre for British Studies. Further details of the members of the centre, their research interests, and the programs they offer may be found at the Harlaxton College website ( www .harlaxton.evansville.edu).

## Undergraduate Course Descriptions

## Accounting (ACCT)

Accounting courses are taught by the faculty of the Department of Accounting and Business Administration. All courses are subject to the leveling policy and prerequisite requirements of the Schroeder Family School of Business Administration. See the "Schroeder Family School of Business Administration" section of this catalog for the complete leveling policy.

ACCT 210 Introduction to Financial Accounting (3) This course is an introduction to financial accounting concepts, with emphasis on communicating financial information to external users for decision making purposes. Students are introduced to the U.S. Generally Accepted Accounting Principles (GAAP), the accounting process, transaction analysis, financial statement preparation, and related topics.
ACCT 211 Introduction to Managerial Accounting (3) This course is anintroductiontomanagerialaccountingconcepts, withemphasison using financial information for decision making purposes. Students are introduced to cost classifications and product costing, multiple methodsofincomestatementandcashflowstatement preparation, budgetpreparationandvarianceanalysis,financialstatementanalysis, and other related topics. Prerequisite: ACCT 210.
ACCT 310 Intermediate Accounting I (3) Stresses basic theory and alternativeapproachestoincomedeterminationandassetvaluation. Includes study of basic financial statements, the accounting cycle, cash, receivables, inventory, property, plant and equipment, intangibles, and liabilities. Prerequisites: Grade of C- or better in ACCT 210. Fall.

ACCT 311 Intermediate Accounting II (3) Examines problems in accountingforstockholders'equity, investment,revenuerecognition, income taxes, pensions, and leases. In-depth study of accounting changes and error analysis, statement of cash flows, financial statementanalysis, disclosurerequirements, andchangingprices. Prerequisite: Grade of C- or better in ACCT 310. Spring.
ACCT 317 Cost Accounting (3) Examines issues and procedures in productcostingforfinancialstatementpurposesunderbothhistorical andstandardcosting.Includesjobcosting, processcosting, andactiv-ity-basedcostingmethods,alongwithinventorymanagement,pricing decisions, cost allocations, and other advanced topics. Prerequisite: Grade of C- or better in ACCT 211. Fall.

ACCT 321 Accounting Information Systems (3) This course is an introduction to the design, implementation and evaluation of accounting information systems. Topics also include transaction processingtechniques,internalcontrols,enterpriseresourceplanning systems, electronic business, and related topics. Prerequisite: ACCT 211. Spring.

ACCT 329 Introduction to Taxation (3) Examines the role of taxes in society and their impact on business entities and individuals. An introduction to income, exclusions, deductions, and credits. Tax planning and analysis for decision-making will also be considered. Prerequisite: Grade of C - or better in ACCT 210. Fall.
ACCT 347 International Accounting (3) Introduces and examines accountingfortransactionsinaglobaleconomy.Coursededicatedto anoverviewoftheconvergenceofU.S.Generally Accepted AccountingPrincipleswithInternationalFinancial ReportingStandards.Specific topics include financial disclosure, foreign exchange, taxation, and ethics. Prerequisite: Grade of C- or better in ACCT 310. Offered periodically.

ACCT 360 Computer Accounting (3) This course introduces students to popular accounting software applications used by millions ofsmallandmedium-sizeorganizations aroundthe world.Students will learn to use the software processes and procedures to prepare reports relatedtotheaccounting cycle,generalledger,accounts payable,accounts receivable, payrollandinventorysystem.Accounting conceptsaredemonstratedinreal-worldbusinesssituations.Gradeof C- or better in ACCT 211.
ACCT 380 Special Topics in Accounting (3) Covers topics not included in other courses, gives greater depth in certain areas, and explores current accounting topics. Repeatable course. Content changes each time course is offered. Prerequisite:Grade of C-orbetter in ACCT 211. Offered periodically.
ACCT395IndependentStudy (1-3) Independentresearchinaccount-ingconductedunderfacultysupervision.Prerequisites:GradeofC-or better in ACCT 210 and permission of instructor.
ACCT 398 Internship in Accounting (3) First internship; a structuredassignmentthatallowsstudentto gain practical experience in an accounting position relating to an area of career interest. Student is directed bytheinternship director and supervised by a member of the cooperating organization. Enrollment in course mustbe concurrent with work experience. A contract (available from the business school'sinternshipdirector)mustbeapprovedandanofferletterfrom the internship providermust be onfile before registering forcourse. Sponsoring institutions may require students to have completed specific course(s) in addition to the following prerequisites prior to beginning the internship. Prerequisites: ACCT 310; EXED 090; permission oftheinternship director oftheSchroederFamily School of Business Administration.
ACCT 414 Auditing (3) Studies the auditing profession and its relationshiptothefinancial community.Includes anexamination of professionalethics,auditingstandards,riskassessment,internalcontrols, auditsofcycles,sampling, analyticalandsubstantive procedures, and reporting.Studentsarealsointroducedtocomputerassistedauditing techniques. Prerequisite: Grade of C- or better in ACCT 310. Spring.
ACCT 420 Advanced Accounting (3) Studies the theory and techniques of accounting and reporting for acquisitions, consolidated financial statements, partnerships, variable interest entities, and foreign currency translation. Prerequisite: Grade of C - or better in ACCT 310. Offered periodically.
ACCT 429 Advanced Taxation (3) A deeper study of federal, state, and local tax laws as it relates to entities, building upon content covered in Accounting 329. Examines the taxation, formation, reorganization, and liquidation of entities. Prerequisite: Grade of C- or better in ACCT 329. Spring.
ACCT430 Advanced Managerial Accounting (3) Studies the applicationofmanagementaccountingtostrategyandtheimpactofnewand evolvingmanagementthinking.Topicsincludecostallocations,sales variances,managementcontrolsystems,transferpricing,performance evaluation, and compensation systems. Prerequisite: Grade of C- or better in ACCT 317. Offered periodically.
ACCT 498 Internship in Accounting (3) Second internship; a structuredassignmentthatallowsthestudenttogainpracticalexperience in an accounting position relating to an area of career interest. Must beadistinctworkexperiencefromthat provided by Accounting 398. Credits earned applyonly as freeelectivecredits. Student is directed by the internship director and supervised by a member of the cooperating organization. Enrollment in course must be concurrent with work experience. A contract (available from the business school's
internship director) must be approved and an offer letter from the internship provider must be on file before registering for course. Sponsoring institutions may require students to have completed specific course(s) in addition to the following prerequisites prior to beginning the internship. Prerequisites: Grade of C- or better in ACCT 398; permission of the internship director of the Schroeder Family School of Business Administration.
ACCT 499 Professional Internship (12) A structured, full-time, professionalassignmentthatallowsstudentstogainpracticalexperience in an accounting position relating to an area of career interest. Stu-dentsaredirectedbytheinternshipdirectorandsupervisedbyamember of the cooperating organization. Enrollment in the course must be concurrent with work experience and all requirements of course must be met during the semester in which the student is enrolled in thecourse.A contract(availablefromthebusinessschool'sinternship director) and an offer letter from the internship provider must be reviewedandapprovedbyareviewcommitteebeforethestudentmay register for the course. Cooperating organizations may require studentstohavecompletedspecificcourses inadditiontothefollowing prerequisitespriortobeginningtheinternship.Studentmustworkat least35hoursperweek, totalingatleast540hoursatthecooperating organization. Prerequisites: Grade of C- or better in ACCT 310; EXED 090; permission of internship director and review committee of the Schroeder Family School of Business Administration. Fall and Spring only. May not be repeated.

## Anthropology (ANTH)

Anthropologycoursesaretaughtbythefaculty oftheDepartmentof Law, Politics, and Society.
ANTH 200 World Prehistory (3) Introduces the field of prehistoric archaeologyandtracestheevolutionofculturefromtheearlieststone tools to the formation of ancient civilizations in both the Old and New Worlds.
ANTH 207 Cultural Anthropology (3) Studies societies all over the world,from hunter-gatherersto industrial states. Explorestherange of variation informs of subsistencetechnology, family, government, religion, and other institutions. Seekstoexplaincultural differences.
ANTH 301 Special Topics in Anthropology (3) Topics chosen on the basis of programmatic need or student interest. Prerequisite: ANTH 200 or 207.

ANTH 310 Indians of North America (3) Surveys the origins, prehistory and traditional ways of life of the Native Americans. Studies representative societiesfromeach ofthemajorcultureareas. Prerequisite: ANTH 200 or 207; or permission of instructor.
ANTH 315 Indians of the Great Plains (3) Covers the buffalo-hunting societies of the American West, their habitat, prehistory, ways of life, and wars with the United States. Prerequisite: ANTH 200 or 207; or permission of instructor.

ANTH 319 Peoples of Africa (3) Surveys African geography, history, and representative societies from different regions of the continent. Prerequisite: ANTH 200 or 207; or permission of instructor.
ANTH 416 Human Evolution (3) Outlines the stages of hominid biological and cultural evolution, with attention to human variation and the primates. Prerequisite: ANTH 200 or 207.
ANTH 440 Linguistic Anthropology (3) Surveys phonetics and phonology,morphology,syntax, children'slanguageacquisition,language origins, historical linguistics, ethnolinguistics, and sociolinguistics. Prerequisite: ANTH 200 or 207; or permission of instructor.
ANTH 453 Anthropology of Religion (3) Explores theories of religious beliefs and behavior in non-Western societies.Coverscosmol-
ogy, myth, ritual, religious specialists, and dynamics. Prerequisites: Six hours of anthropology; junior or senior standing.
ANTH 494 Directed Study (1) See Sociology 494. Prerequisites: Nine hours of anthropology; junior or senior standing; permission of instructor.
ANTH 496 Internship (1) Internships available to majors of junior or seniorstandingwhohavecompletedcorecourses.GPA requirements must be met and student must file an internship application with advisor.
ANTH 497 Internship in Teaching Anthropology (1) Provides majors of junior or senior standing with a comprehensive, supervised field experienceinteachingandanthropologicalpedagogy.Designedfor students whoarepreparingforgraduate study inthe social sciences. GPA requirements must be met and students must file a teaching internshipapplicationwithadvisor.Prerequisites:Sociology-Anthropologymajor,sponsorshipbythesupervisingfacultymember,junior or senior standing, or permission of instructor. 1-2 credits.

## Archaeology (ARCH)

Archaeology courses are taught by the faculty of the Department of Archaeology and Art History.
ARCH 100 Great Discoveries in Archaeology (3) This course providesanintroductiontothediscipline ofarchaeology, an overviewof greatarchaeologicaldiscoveriesworldwide, andacriticaldiscussion of archaeological myths and hoaxes. It is intended for students in any major who are interested in learning about the past and how it is presented to the public.
ARCH 105 Introduction to Greek Archaeology (3) Comprehensive overview of the material culture of the Greeks from the Bronze Age through the Hellenistic period, tracing the main developmental trends in architecture, city planning, sculpture, and the minor arts both in the Greek mainland and the Greek colonies overseas. Althoughprimarilyarchaeologicalinorientation, necessaryhistorical context is provided. Fall.
ARCH 106 Introduction to Roman Archaeology (3) Comprehensive survey ofthematerialculture oftheRomansexamining architecture, city planning, art, and technology. Traces development of Roman civilization from the Republic to the Late Antique period. Spring.
ARCH 192 Introductory Archaeology Seminar (3) Seminar intended primarily for freshman or new archaeology majors. Emphasizes fundamentalconceptsrelatingtostratigraphy, relativeandabsolute chronologies, types of archaeological data, map/section reading, recordingprocedures,approachestointerpretation,andresearchskills.
ARCH 206 Introduction to Near Eastern Archaeology (3) Study of Mesopotamia, Anatolia, and the Levant from the Neolithic period to the establishment of the Persian Empire.
ARCH 207 Introduction to Egyptian Archaeology (3) Overview of Egyptian civilization from the predynastic period to the New Kingdomthroughtheexploration offuneraryarchitecture,sculpture,wall painting, tomb furnishings, and other minor arts. The course examines archaeological evidencefrom a historical perspective,focusing on both the local history of Egypt and on its relationship with other Mediterranean civilizations.
ARCH 285 Technical Skills for Archaeologists (3) Introduces archaeology students to skills and techniques useful in recording and analyzing field data as well as developing 3-D models of the project site.Topics includetechnicalsketchingandutilizing computeraided (CAD) techniques for development of accurate 2-D drawings as well as 3-D models. Prerequisites: Sophomore standing.

ARCH 305 Archaeological Ceramics (3) Examines the study of pot-
tery in archaeology, including physical aspects of ceramic manufacture, developmentoftypologiesandrelativechronologiesforfabric, shape, and decoration, analysis and conservation of ceramic finds, as well as documentation of ceramic finds through profile drawing and cataloging. Uses Greek painted pottery from the Late Bronze Age through the start of the Classical period, Roman red wares, and localWoodlandandMississippianpotteryasexamples.Prerequisite: ARCH 105, ARCH 192 or ARTH 208; or permission of instructor.
ARCH 306 Greek Architecture (3) Traces the development of Greek architecturefromtheLateBronzeAgethroughtheHellenisticperiod. Studiesthedevelopmentofcityplanning,temples,secularbuildings, and funerary monuments. Prerequisite: ARCH 105 or ARTH 208 or permission of instructor.
ARCH 307 Roman Architecture (3) Examines the development of Roman building from its roots in Greek and Etruscan architecture to theeclecticRomanarchitecturalidiomoftheEmpire.Emphasizesthe Roman integration of traditional building elements with their own increasing technical virtuosity as structural engineers. Prerequisite: ARCH 106 or ARTH 208 or permission of instructor.
ARCH 308 Greek and Roman Sculpture (3) Examines the development of sculpture within the Greco-Roman world. Topics covered include the evolution of naturalism in the Greek Archaic period, the high classical style of the 5th century BCE, the varied genres of the Hellenistic world, Roman Republican portraiture, and Roman historical reliefs. Prerequisite: ARCH 105 or 106 or ARTH 208 or permission of instructor.
ARCH 309 The Etruscans (3) A study of the origins of the Etruscans, who made their appearance in central Italy in the 7th century BCE, and their impact on other Mediterranean cultures. An attempt is made to reconstruct their culture as it can be understood from the architecture and artifacts preserved today. Prerequisite: ARCH 105 or ARTH 208 or permission of instructor.
ARCH 311 Archaeology of Syro-Palestine (3) Examines the archaeology of Syro-Palestine (modern Israel, Jordan and the Palestinian National Authority) from late prehistory through the Persian period (ca. 8000-332 BCE). Although archaeological data is the primary source of information, other sources, including the Hebrew Bible (Old Testament) and other texts, are employed where appropriate.
ARCH 320 Topics in Archaeology (3) Focuses on a topic not offered regularly, such asAegeanarchaeology or northernEuropean prehistory. May be repeated. Prerequisite: ARCH 105 or 106 or ARTH 208 or permission of instructor.
ARCH 340 Field Techniques (3) Introduces students to the process offieldarchaeology.Projectsvaryfromyeartoyear, butinvolveeither excavation of a historical site in Evansville, or assisting with an excavation or survey conducted locally.
ARCH 394 Non-UE Archaeology Field Practica (3) This course is usedtorecordarchaeologicalfieldpracticasponsored byinstitutions other than the University of Evansville.
ARCH 395 Practicum in Archaeology (3) This practicum in archaeologyintroducesstudentstoboththepracticalandtheoreticalaspects of archaeology. Students participate in an excavation as well as in documentationandconservation ofartifacts.Theworkisconducted underthesupervision ofaprofessionalstaffofarchaeologists. Prerequisite: ARCH 105 or 106 or permission of instructor.
ARCH 400 Archaeological Method and Theory (3) Examination of the theoretical bases of the discipline of archaeology, the history of thediscipline, and themajor schools of interpretation. Also, research design, development of chronologies, and the application of scientific techniques to analysis of archaeological remains. Prerequisites:

ARCH 105 or 106; one 300-level archaeology course; or permission of instructor. Course fulfills capstone requirement.
ARCH 415 Women in Antiquity (3) Seminar focuses on women in antiquity. Reviews recentstudies of archaeological investigations of women'ssocialandcultural rolesandfocusesonselectedcasestudies of women in the ancient Near East and eastern Mediterranean from late prehistory through Classical antiquity.
ARCH 420 Northern European Prehistoric Archaeology (3) Examines the archaeology of northern Europe from the Neolithic period through the Roman period. Emphasis on the Celtic cultures of northern Europe.
ARCH 492 Topical Seminars in Archaeology (3) Special seminar topics in archaeology not included in the regular course offerings. May be repeated.
ARCH 493 Independent Study in Archaeology (1) Research in areas ofarchaeologyontopics notsufficiently coveredinexisting courses. Subjectandcreditearnedmustbeapprovedbythesupervisingfaculty memberanddepartmentchair.Mayberepeatedforamaximum ofsix hours of credit. Prerequisites: Junior standing; consent of instructor.

## Art (ART)

Art courses are taught by the faculty of the Department of Art.
ART 102 Art in Elementary Schools (3) Examination of the perceptual, creative, andaestheticgrowthanddevelopmentofchildren throughartexperiences.Somebasicstudioinstruction withartappreciation and historical overview. Lab fee. Spring.
ART 105 Introduction to the Visual Arts (3) Lecture. Studies architecture, painting, andsculpturewithemphasisonsocialandaesthetic considerations. Fall, spring.
ART 200 Introduction to Studio Art (3) An introduction to the studio disciplines for non-art majors. Instruction of the art elements as used in such areas as drawing, painting, printmaking, and sculpture. Lab fee. Fall, spring.
ART 201 Introduction to Art Therapy (3) Introduces students to the fundamentals of art therapy including theory, methods of practice, andtechniquesthroughlecture,experience, and casestudypresentations. No prior art experience required. Prerequisites:Sophomore status; recommended courses PSYC 121, 226. Fall.
ART 210 Design (3) Introductory studio course emphasizes basic principles of design, composition, and color theory. Six hours studio. Fall.
ART 213 Computer Graphics (3) An introduction to the basic uses of theMacintoshcomputerasusedinthevisualarts.Emphasizesexperimentation withvarioussoftwarepackagesandthedevelopmentofthe interchangeableandflexiblemovesfromhands-onskillstoelectronic means. Fall, spring.
ART 214 Basic Photography (3) Introduction to basic camera usage and traditional darkroom techniques. Access to a 35 mm print film camera is required. Six hours studio. Lab fee.
ART 220 Drawing (3) Introduces and explores various drawing media with emphasis on perception and drawing techniques. Six hours studio. Fall.
ART 221 Drawing (3) Explores a variety of media and techniques withemphasisgiventocompositionandcreativeexpression.Sixhours studio. Spring.
ART 301 Creative Development and Art Therapy (3) Introduces the fundamentalsofcreativedevelopmentandarttherapyincludingtheory,methodsofpractice,andtechniquesthroughlecture,experience, and case studies. No prior art experience required. Prerequisites: Sophomore status; recommended courses PSYC 121, 226. Spring

ART 314 Creative Photography (3) Emphasizes creative and innovative uses of photography with instruction in camera and darkroom procedures. Prerequisite: ART 214 or permission of instructor. Six hours studio. Lab fee.

ART 315 Typography (3) A fundamental study of the history of type, its creative use and function as a communicative tool. Explores basic principles of good layout design. Six hours studio. Macintosh lab. Prerequisites: ART 210, 213; or permission of instructor.
ART 316 Publication Design (3) A study of layout design, the creative arrangement of type and visuals on a page. Using appropriate layoutsoftware,studentscreatelayoutdesignsforvariouspublications (magazines, newspapers, brochures,books).Filepreparationforprint is covered. Six hours studio. Macintosh lab. Prerequisites: ART 213, 315; or permission of the instructor.

ART 322 Digital Photography (3) Introduction to digital photographymethodsandcreativemanipulationonthecomputer, asanalternative to traditional techniques. Familiarity with Photoshophelpful. Macintosh lab. Prerequisite: ART 213 or permission of instructor. Repeatable. Lab fee.
ART 325 Life Drawing (2) Drawing from the model as a means of understandingform, shape, andline. Fourhoursstudio. Repeatable. Lab fee.
ART 330 Printmaking (3) Emphasizes basic printmaking methods to thedevelopmentofideasandaestheticconsiderationsofmaterialsand techniques employed in printmaking. Six hours studio. Repeatable. Lab fee. Spring.
ART 340 Painting (3) Emphasizes basic painting techniques with investigation ofdifferentadvancedmedia.Sixhoursstudio. Repeatable. Fall, spring.
ART 345 Watercolor (3) Covers basic, creative, and technical problems in watercolor painting. May be applied toward the painting majorinthestudio BFA and BSdegrees.Sixhoursstudio. Repeatable.
ART 350 Metalwork/Jewelry (3) Studies basic forming methods: fabricating, casting, forging, and raising with investigation of differentmaterialsandtechniquesemployedinmetalworkandjewelry.Six hours studio. Repeatable. Lab fee.
ART 360 Ceramics (3) Offers basic methods of hand building and wheelthrowing and the use of glazes and kiln firing procedures with investigation of materials and techniques employed in ceramics. Six hours studio. Repeatable. Lab fee. Fall, spring.
ART 370 Sculpture (3) Introduces concepts, materials, and tools of sculpture.Creativeexpressionaswellasexplorationintoidea,form, and material relationships.Sixhoursstudio.Repeatable.Labfee.Fall,spring.
ART401 Art and Culture (3) Senior seminar devoted to special topics concerning historical traditions in the visual arts, current art issues, and professional development. Prerequisite: Senior status.
ART 405 Art Therapy Seminar (2) In-depth investigation of the fundamentals of creative development and arttherapy, focusing on assessment, research, application, andexploration ofthedynamics of thegroup process.Lecture,experientiallearning, and casestudypresentations included.No prior artexperience required. Prerequisites: ART 201, 301; PSYC 121, 226.
ART 410 Portfolio Preparation (3) Study of current trends in graphic designfieldsand possiblecareerpaths. Preparation of a professional graphicdesignportfoliothatdemonstratesthestudent'sproficiencies and strengths. Includes résumé preparation, personal logo, and self promotional projects. Six hours studio. Repeatable. Macintosh lab. Prerequisites: ART 213, 315, 316; or permission of instructor.
ART 417 Advanced Imaging and Illustration (3) Study of painting,
drawing, and photo manipulation software as well as of traditional media to produce illustrations for various uses. Also explores the creativeprocessandideageneration.Sixhoursstudio.Macintoshlab. Prerequisite: ART 213, 315, 316; or permission of instructor.
ART 490 Practicum in Art (1) A practical experience in a supervised universitysettingthatspecializesinthefield ofartordesign. Precedes internshipand preparesstudentstoperformforemployersoutsidethe universitycommunity.Prerequisite:sophomorestanding;permission of sponsoring faculty member. Repeatable up to 12 hours.
ART 492 Topical Workshops (1) Special topics in art not included in the regular course offerings. Based on lecture or lecture/studio. Repeatable.
ART 493 Independent Study in Art (1) Research in an area of visual arts that pertains to individual interests. May not be substituted for regularcourseofferings.Subjectandcreditearnedmustbeapproved by the instructor. May be repeated for a maximum of six hours of credit. Prerequisites: Sophomore level; permission of instructor; approval of department chair.
ART 495 Internship in Art (3) An apprenticeship or internship program designed to meet the educational needs of students' professional goals. Visual communication design majors may qualify for internships with professional agencies, BFA studio majors with professionally qualified artists or institutions, and BS in artand associatedstudiesmajorswithinstitutions relatedtotheircareerinterests. A maximum of 12 credit hours may be earned in Art 495 toward thedegree.Prerequisites:Juniorstanding;permission ofsponsoring faculty member.
ART 497 Methods of Teaching Art in Senior High/Junior High/ Middle School and Elementary Schools (3) This course explores the creative and mental growth of elementary, middle school, and secondary school students participating in classes for the visual arts. In addition, development of an area-specific portfolio is required. This class is for art education majors only.

## Art History (ARTH)

Art History courses are taught by the faculty of the Department of Archaeology and Art History.
ARTH 208 Survey of Art I (3) A survey of architecture, sculpture, and painting from prehistory throughthe late Gothic period, including non-Western civilizations of India, Southeast Asia, and China. Fall.
ARTH 209 Survey of Art II (3) A survey of architecture, sculpture, and painting of Western and non-Western regions from the Renaissance to the present, including the Muslim world and Japan. Spring.
ARTH 384 Renaissance Art (3) Architecture, sculpture, and painting in Italy, France, Germany, and the Netherlands ca. 1300-1600. Prerequisite: ARTH 208 or 209 or permission of the instructor.
ARTH 385 Baroque Art (3) Architecture, sculpture, and painting in southern Europe, Belgium, England, Germany, and the Netherlands ca. 1600-1750. Prerequisite: ARTH 208 or 209 or permission of the instructor.
ARTH 386 Eighteenth and Nineteenth Century Art (3) Study of the major movements of the 18th and 19th centuries, including Neoclassicism, Romanticism, Realism, Impressionism, and Postimpressionism to 1900. Prerequisite: ARTH 208 or 209 or permission of the instructor.
ARTH 389 Twentieth Century Art (3) Western painting and sculpture from 1900 to the present. Prerequisite: ARTH 208 or 209 or permission of instructor.

ARTH 391 Topics in Asian Art (3) Thematic introduction to the visual arts of China and Japan, with emphasis on Chinese art from the Han period through the 20th century. Prerequisite: ARTH 208 or 209 or permission of instructor.
ARTH 492 Topical Seminars in Art History (3) Special topics in art history not included in regular course offerings. Consists of lectures and discussion with an emphasis on research. May be repeated for a maximum of nine credit hours. Prerequisite: ARTH 208 or 209 or permission of instructor.
ARTH 493 Independent Study in Art History (1) Research in areas of art history on topics not covered in existing courses. Subject and creditearned must be approved by the supervising faculty member and department chair. May be repeated for a maximum of six credit hours. Prerequisites: Junior standing; permission of instructor.
ARTH 495 Internship in Art History (3) Internships designed to meettheeducationalneeds ofstudents'professionalgoalsarerecommended for art history majors and may be arranged with a professional individual or institution. A maximum of 12 credithours earned inArtHistory 495 may counttowardthedegree. Prerequisites:Junior standing;permission offacultyadvisor,faculty/museumliaison, and department chair.
ARTH H378 British Romantic Art (3) A study of British art from 1790 to 1850, including academic traditions, landscape painting, genre painting, and the pre-Raphaelites. Taught at Harlaxton College. Prerequisite: ARTH 208 or 209 or permission of instructor.
ARTH H379 Art and Architecture in Victorian Britain (3) A study of art and architecture produced in Britain during the reign of Victoria, including revival and industrial architecture, the arts and crafts movement, and the "New Sculpture." Taught at Harlaxton College. Prerequisite: ARTH 208 or 209 or permission of instructor.
ARTH H383 Medieval Art (3) Architecture, sculpture and painting from early Christianity through Gothic in the Byzantine Empire and Western Europe. Taught at Harlaxton College. Prerequisite: ARTH 208 or 209 or permission of instructor.
ARTH H387 English Art and Architecture From the Late Roman Period to 1533 (3) A study of British art from the late Roman occupation. Migration art, manuscript painting, and domestic and ecclesiastical architecture through the reigns of Henry VII and early Henry VIII. Taught at Harlaxton College. Prerequisite: ARTH 208 or 209 or permission of instructor.
ARTH H388 English Art and Architecture 1500-1850 (3) Survey of the visual arts in England from Elizabethan times to the mid19th century. This is a period when the English became a consumer culture. In addition to such artists as Holbein, Van Dyck, Reynolds, Constable, andTurner, the patrons, promoters, collectors, andtravelers will be considered. Prerequisites: ARTH 208, 209; or permission of instructor.

## Astronomy (ASTR)

Astronomy courses are taught by the faculty of the Department of Physics.
ASTR 101 Descriptive Astronomy (3) Studies the solar system, stellar structure and evolution, galaxies and cosmology, emphasizing the historicaldevelopmentandobservationalbasisforourunderstanding of the universe. Lecture.
ASTR 102 Lab for Introduction to Astronomy (1) Optional laboratory course to accompany ASTR 101. Students will use Koch Immersive Theater at the Evansville Museum and classroom and outdoor settings to explore topics related to astronomy, including celestial mechanics, planetary phenomena such as cratering, and
optics. Corequisite: ASTR 101. Two hours in class, one outside class required each week.
ASTR 320 Astrophysics (3) A detailed study of the physical processes thatdriveavarietyofastrophysical phenomena. Topics includeradiation productionandinteraction with matter,accrediting systems,and observationaltechniques from radioto gamma-rays.Specific applicationsmayinclude(dependingonstudentinterest)stellarstructure andevolution, compactobjects,galacticcompositionanddynamics, and the origin and structure of the universe. Lecture. Prerequisites: MATH 323; PHYS 213. Recommended: ASTR 101. Same as PHYS 320.

ASTR 422 Cosmology (2) Explores the history and evolution of the universe with anemphasis on theoretical models that may betested bymodernexperimentalandobservationaltechniques. Topicsinclude the Big Bang, cosmic microwave background radiation, darkenergy, darkmatter,origins ofstructureintheuniverse, generalrelativity, and specifictopics ofinteresttoresearchersinthefield.Lecture. Prerequisite: PHYS 305. Recommended: ASTR 101, 320. Same as PHYS 422.

## Athletic Training (AT)

Athletic Training courses are taught by the faculty of the School of Public Health.
AT 180 Introduction to Athletic Training (3) Introduces the field of athletic training andthecareand prevention ofathleticinjuries.Topics include, but are not limited to, the organization, administration, education, and counseling techniques used in caring for athletes, as well as the foundation of injury prevention, assessment, treatment, and rehabilitation.

AT 281 Athletic Injury Prevention and Wellness Promotion (3) This course is designed as a follow up to the introduction to the field of athletic training (AT 180). Topics include, but are not limited to the foundationofinjurypreventionthroughtapingandbracing, physical base line assessment of and the proper procedures to provide emergency care to an injured patient. Prerequisite: AT 180. Spring.
AT 282 Basic Skills in Athletic Training (3) Addresses various topics thatdevelopthestudent'scompetenceasanathletictrainer.Emphasis placed on skills such as construction and application of protective devices, tapingandbandagingtechniques,on-fieldassessmenttechniques, andemergency care.DesignedtosatisfyCAATEcompetences relatedtotheabove-mentionedcontentareasandintendedforathletic training majors. Prerequisite: AT 180. Corequisite: AT 282L.
AT 287 Therapeutic Modalities in Athletic Training (3) Lecture/lab courseaddressestheprinciples,indications, contraindications, physiological effects, safety precautions, and application of therapeutic modalitiesforthetreatmentofathleticinjuries. Informationincludes knowledgeoftheinflammatoryresponsetoinjuryandillnessandthe effectiveness oftherapeuticmodalitiestoassistthebodyinthehealing process. Designed to satisfy CAATE competences related to the use of modalities and intended primarily for athletic training majors. Corequisite: AT 287L.
AT 291 Clinical Education in Athletic Training (2) One of a series of sixclinicaleducationcoursesdesignedto provideproficiencyinstruction and clinical experience in the field of athletic training. Emphasis placedonclinicalanatomyand goniometry.Contentincludespalpation of various bony landmarks and soft tissue structures as well as goniometricskilldevelopment.Clinicalapplicationandunderstanding emphasized. Field experience rotations assigned perthe clinical instruction plan. Class meets formally approximately one hour per week outside of the clinical setting.
AT 292 Clinical Education in Athletic Training II (2) One of a series ofsixclinicaleducationcoursesdesignedtoprovideproficiency
instruction and clinical experience in the field of athletic training. Emphasis giventoclinicalapplication oftherapeuticmodalities.Field experience includes sport team rotations with an emphasis in the application of modalities. Student works toward completion of the proficiency check-off sheet. Class meets formally at least one hour perweekoutsideoftheclinical settingtoensureadequateprogressis beingmadetowardcompletionoftherespectiveclinical proficiencies.

AT 350 Administration of Athletic Training (3) Familiarizes students withtheadministrationandmanagementresponsibilities ofathletic training. Topics of study include management of athletic training facilities, personnel, students,facilitydesign, purchasing ofsupplies and equipment, and budgeting. Designed to satisfy CAATE competences relatedtohealthcareadministrationandintendedforathletic training majors. Prerequisite: AT 388.
AT 388 Evaluation of the Lower Body (3) Addresses the theory, techniques,andlaboratoryexperiencesrelativetotheassessmentand evaluation ofathleticinjurieswithemphasisonthelowerbody.Other topics related to assessment are covered including common illness recognition. Content areas include knowledge and skills for clinical evaluation to determine the proper injury or illness treatment and referral when appropriate. Designed to satisfy CAATE competences related to evaluation and illness of the lower body and intended for athletic training majors. Prerequisite: AT 282.

AT 389 Evaluation of the Upper Body (3) Addresses the theory, tech-niquesandlaboratoryexperiencesrelativetotheassessmentandevaluation of athletic injuries with emphasis placed on the upper body. Other topics related to assessment are covered including common illness recognition. Content areas include knowledge and skills for clinicalevaluationtodeterminetheproperinjuryorillnesstreatment and referral when appropriate. Designed to satisfy CAATE competencesrelatedtoevaluationandillnessoftheupperbodyandintended for athletic training majors. Prerequisite: AT 388.

AT 390 Rehabilitation of Athletic Injuries (3) Lecture/lab course provides the student knowledge related toallaspects ofthe rehabilitation of athletes.Emphasis placed ondevelopment ofatheoretical model to assess and fully rehabilitate an athlete following an injury, surgery or related illness. Lab time develops the skills required to implementarehabilitation programintheclinical setting.Designed to satisfy CAATE competences related to rehabilitation and exercise and intended for athletic training majors. Prerequisite: AT 389.

AT 391 Clinical Education in Athletic Training III (2) One of a seriesofsixclinicaleducationcoursesdesignedtoprovideproficiency instruction and clinical experience in the field of athletic training. Emphasis on basic taping and bandaging techniques, emergency procedures, and field assessment. Field experience includes local highschoolfootballcoverageandotherfieldexperienceasassigned. Studentworkstowardcompletionoftheproficiencycheck-offsheet. Classmeetsformallyatdiscretion oftheinstructoroutsideoftheclinical setting to ensure adequate progress is being made toward completion of the respective clinical proficiencies. Prerequisite: AT 292.
AT 392 Clinical Education in Athletic Training IV (2) One of a series of six clinical education courses designed to provide clinical experience in the field of athletic training. Emphasis given to evaluation of athletic injuries and illness. Field experience spent with a college trainer working primarily in a traditional college athletic training room setting. Student works toward completion of the proficiency check-off sheet. Class meets formally at discretion of the instructor outside of the clinical setting to ensure adequate progress is being madetowardcompletion oftherespectiveclinical proficiencies.Prerequisite: AT 391.

AT 490 Pharmacology and Medical Conditions (3) Offers insight on
current trends in pharmacology use in an athletic training environment. Also offers current evaluation of general medical conditions, treatment, and a referral base for conditions found in athletics.

AT 491 Clinical Education in Athletic Training V (2) One of a series of six clinical education courses designed to provide clinical experienceinthefield ofathletictraining.Emphasisgiventorehabilitation. Field experience assigned per the clinical instruction plan and may include time in a physical therapy outpatient setting. Student works toward completion of the proficiency check-off sheet. Class meets formally at discretion of the instructor outside of the clinical setting toensureadequate progressisbeingmadetowardcompletion ofthe respective clinical proficiencies. A case study approach is utilized to emphasize integration of previously learned skills into the complete care of the athlete. Prerequisite: AT 392.
AT 492 Clinical Education in Athletic Training VI (2) One of a series of six clinical education courses designed to provide clinical experience in the field of athletic training. Emphasis placed on pharmacology,nutritionalaspects, psychosocialintervention,andreferral. Emphasis also placed on preparation for the BOC exam. Class meets formally at discretion of the instructor outside of the clinical setting toensureadequateprogressisbeingmadetowardcompletion ofthe respectiveclinical proficiencies.Fieldexperienceassignmentmadeper the clinical instruction plan. Prerequisite: AT 491.

## Biology (BIOL)

BiologycoursesaretaughtbythefacultyoftheDepartmentofBiology.
BIOL 100 Fundamentals of Biology (4) Course for non-science majors that explores fundamental concepts of biology and relates them to social issues. Three hours lecture, two hours lab. Credit not applicable for biology majors or minors. Fall, spring, summer.
BIOL 107 General Biology (4) Course for health science majors that introducesbasicprinciplesofcellbiology,metabolism, genetics,molecular biology, and evolution. Three hours lecture, two hours lab. Fall.

BIOL 110 Clinical Microbiology (3) Introduces microorganisms and includesisolation, pathogenicity,serology,identification,ecology,and thesignificanceofmicroorganismstohumans. Twohourslecture,two hours lab. Credit not applicable for professional biology majors. Fall.
BIOL 112 Human Anatomy and Physiology I (4) Introduces basic anatomyandphysiologyusingasystemsapproach.Emphasizescells, tissues, musculoskeletal system, and nervous system. Three hours lecture, two hours lab. Credit not applicable for biology majors or minors. Same as EXSS 112. Fall.
BIOL 113 Human Anatomy and Physiology II (4) Continues the study of topics covered in Biology 112 and includes the endocrine, cardiovascular, immune, respiratory, urinary, and digestive systems. Three hours lecture, two hours lab. Credit not applicable for biology majors or minors. Prerequisite: Biology 112 with a grade of C- or better or permission of the instructor. Same as EXSS 113. Spring.
BIOL 118 Modern Biology: Environmental Perspectives (3) Gives biology majors foundational knowledge and skills for subsequent coursesinthemajor.Seminarstylecourseintroducesenvironmental topicsbyexploringecological,societal, andethicalissuessurrounding therelationshipofhumanstotheirenvironment.Prerequisite:Freshmenadmissiontothebiologyorenvironmentalsciencesprogramsor permission of the chair of the Department of Biology. Spring.
BIOL 119 Introductory Biology: Molecular Perspectives (4) Course designedforstudentsmajoringinappliedbiology, professionalbiology, biochemistry, neuroscience and clinical lab science. Introduces basicprinciplesofbiochemistry,molecularbiologyand genetics,and theirrelevancetomodernsociety.Fourhoursintegratedlectureand
lab.
BIOL 120 Introductory Biology: Organismal Diversity (4) Provides an introduction to the major groups of living organisms, with an emphasisontheirstructure,function, andevolutionaryrelationships. Four hours of integrated lecture and lab.
BIOL 199 Special Topics in Biology (1) Lectures, discussions, or speciallaboratorytopicsnotcoveredinregularcourseofferings.Provides greaterdepthtotopicsofspecialinterestorexplores rapidlychanging areas in biology. May be repeated. Prerequisites announced when specific topics scheduled.
BIOL 201 Human Genetics and Society (3) Discusses human genetics and its relation to social issues. Credit not applicable for biology majors or minors.
BIOL 214 Field Zoology (3) Emphasizes the identification, structure, functions, ecology, and behavior of animals. Regional field study involved. Summer.
BIOL 215 Field Botany (3) A study of mosses, ferns, conifers, and flowering plants, includingidentification, morphology, andecology. Field study involved. May be taken twice for credit if the field sites are different. Summer.

BIOL 225 Horticulture (3) A study of the growth, development, and technology involved in the production, maintenance, use, and marketing of horticultural plants and products. Two hours lecture, two hours lab. Spring, alternate years.
BIOL 299 Special Topics in Biology (1) Lectures, discussions, or speciallaboratorytopicsnotcoveredinregularcourseofferings.Provides greaterdepthtotopicsofspecialinterestorexploresrapidlychanging areas in biology. May be repeated. Prerequisites announced when specific topics scheduled.
BIOL 305 Microbial Ecology (3) Concerned with the wide range of microorganisms that exist and their roles in the environment. Concentrates on the following areas:(1) microbial environments; (2) detection ofmicrobialactivity;(3) impactofmicrobialactivityonthe environmentintermsofnutrientcycling and pollutantfate;(4)detectionandcontrolofpathogensintheenvironment;(5)bioremediation (includes riskassessmentandenvironmental biotechnology). Three hours lecture, field studies atsites that utilize microbes (e.g.,sewage treatment plants,fermentorfacilities). Prerequisite: A 100-level biology course with a grade of C - or better or permission of instructor. Spring, alternate years.
BIOL 310 History of Life (3) A study of major events in the history of lifefromtheorigin oflifesomefourbillionyears agototheextinction andspeciationepisodesthathaveresultedinthevarietyoforganisms that occupy the planet in more recent geologic time. Prerequisite: A 100-level biology course with a grade ofC-orbetterorpermission of instructor. Fall, alternate years.
BIOL 315 Ethnobotany (3) Examines the intimate connection between plants and human society.It is integrative inthat it includes informationfrombotany, chemistry, archaeology, anthropologyand history.Topicscoveredwillincludeagriculture,geneticallymodified crops, medicinal plants, plant secondary compounds and psychoactive plants. The goal of the course is to provide students with a betterunderstandingoftheimportanceofplantsand plant products to human civilization. Students will gain experience in reading and summarizing scientific articles and books.
BIOL 320 Evolution and Ecology (4) Introduces principles and concepts of evolution and ecology, with emphasis on the intricate andintrinsicrelationshipbetweenthesedisciplines.Examinesmechanisms of evolutionary change and interactions of organisms, populations, and communities of organisms within their environment.

Addresses how these interactions occur, what effects they have on thefunctioning of natural communities, and how they influence the evolutionofpopulationsandspecies. Threehourslecture,threehours lab. Prerequisites: BIOL 118 with a grade of C- or better. Fall.

BIOL322Biological Physics (3)Introducesbiophysicalmethodsfrom aphysicsperspectiveanddiscussestheapplicationofthesemethods toward research questions in biology. Topics include biomolecular structures, structure determination and simulation, and molecular motors. Three hours lecture. Prerequisite: MATH 221; PHYS 121 or 210. Same as PHYS 322.

BIOL 323 Tropical Ecology of Costa Rica (3) Provides a detailed understanding of the natural history and ecology of Costa Rica, including the identifiable features of many plants and animals of Costa Rica. Designed primarily for biology and environmental studies majors, the course develops writing and presentation skills, whilealsoframingstudentlearninginanecologicalandconservation context. The course culminates in a trip to Costa Rica ( $\sim 2$ weeks); the trip component of the course helps to solidify student learning through experiential learning. Two hours lecture, field trip to Costa Rica. Prerequisite: BIOL 118 with a grade of C- or better or permission of instructor. Spring.
BIOL 330 Mycology (4) Introduces fungi with emphasis on ecology, morphologyandtaxonomy ofrepresentativegroups. Twohourslecture, four hours lab. Prerequisites: BIOL 119 and 120 with a grade of C - or better or permission of instructor.

BIOL 331 Genetics (4) Fundamental principles of inheritance in animals, plants, and microorganisms with emphasis on molecular genetics. Three hours lecture, three hours lab. Prerequisite: Biology 119 with a grade of C - or better or permission of instructor. Recommended: BIOL 120 with a grade of C- or better. Fall, spring.
BIOL 333 Animal Behavior (3) Studies the principles of biological rhythms,migration,aggression,competition,learning, reproduction, and social behavior of animals. Three hours lecture, field studies. Prerequisite: BIOL 120 with a grade of C - or better or permission of instructor. Spring.
BIOL 340 Cellular and Molecular Biology (4) Covers the principles of eukaryotic cell structure and function and the molecular bases of cellular processes. Topics will include: macromolecules; energetics; membranes;cellularorganelles;geneexpression;signaling;celldivision; DNA replication; RNA and protein synthesis and processing; andmolecularaspectsofimmunology, cancerandrecombinantDNA technology. The course will build on the survey knowledgefrom the required prerequisite courses. Prerequisite: BIOL 331 or permission of instructor. Spring.
BIOL 350 Vertebrate Zoology (4) Emphasizes the taxonomy, comparativemorphology, behavior, and lifehistory ofvertebrates. Three hours lecture, three hours lab, field studies. Prerequisite: BIOL 120 with a grade of C - or better or permission of instructor. Spring.
BIOL 360 Summer Field Station Study (1) Biology studies conducted at a marine, freshwater,mountain, or desert field station. Summer.
BIOL 399 Special Topics in Biology (1) Lectures, discussions, or speciallaboratorytopicsnotcoveredinregularcourseofferings.Provides greaterdepthtotopicsofspecialinterestorexplores rapidlychanging areas in biology. May be repeated. Prerequisites announced when specific topics scheduled.
BIOL 414 Plant Diversity (4) Studies the identification and classification oflocal vascular plants. Herbarium collection required. Three hours lecture, four hours lab. Prerequisite: BIOL 120 with a grade of C - or better or permission of instructor. Spring, alternate years.

BIOL 415 Biostatistics Computational Biology (4) Explores bio-
logical systems using quantitative biological models. Application of statisticaltools, numericaldatasets, andcomputer-basedtechniques totesthypotheses,createpredictivemodels, andinterpretresultsand patterns. Three hours lecture, three hours lab. Prerequisite: BIOL 320 with a grade of C - or better or permission of instructor. Spring, alternate years.
BIOL 423 Ecology (4) Examines how organisms interact with each other and with their environment. Addresses the physical environmentandthewayphysiologicaladaptationsorganismshaveevolved toexploitit,populationdynamics,interactionsbetweenspeciespopulations,biogeography, andenvironmentalissues,especiallythosethat relatetotheimpactofhumansontheecology ofnatural populations ofplantsandanimals. Threehourslecture, threehourslab,fieldstudies. Prerequisite: BIOL 320 with a grade of C - or better or permission of instructor. Fall, alternate years.
BIOL 425 Developmental Biology (4) Studies the cellular, genetic, andmolecularinteractions ofanimal development. Threehourslecture, three hours lab. Prerequisite: BIOL 331 with a grade of C- or better or permission of instructor. Spring, alternate years.
BIOL 427 Animal Physiology (4) Studies the normal functions of animalorgansandsystems.Topicsincludemetabolism,transmission ofnerveimpulses,reproduction, andeffectsofhormones.Threehours lecture, two hours lab. Prerequisites: BIOL 119 or 120, and CHEM 240 with a grade of C - or better; or permission of instructor. Fall.
BIOL 428 Plant Physiology (4) Major biological activities of higher plants with emphasis on water relations, mineral nutrition, metabolism, growth, and development. Three hours lecture, two hours lab. Prerequisites: BIOL 120 and CHEM 118 with a grade of C- or better; or permission of instructor.
BIOL 430 Microbiology (4) Covers general principles of bacterial growth and activities. Three hours lecture, four hours lab. Prerequisite: BIOL 119 with a grade of C or better; or permission of instructor. Recommended: BIOL 120 with a grade of C- or better. Fall.
BIOL 434 Parasitology (4) Studies the nature of parasitism with respect to morphology, physiology, and host parasite relationships. Three hourslecture, two hours lab. Prerequisites: BIOL 119and 120 with a grade of C - or better; or permission of instructor. Fall, alternate years.
BIOL 436 Human Physiology (3) A detailed study of human function, beginning at a cellular level. Emphasis is placed on the neuromuscular, cardiovascular, pulmonary, renal, and endocrine systems. Theeffectsofexerciseand pathologyareintegratedintoeachsystem. Prerequisite: PT 431 or permission of the instructor. Fall.
BIOL 440 Cell Biology (4) Studies the basic principles and information that form the foundation of cell biology, provides exposure to some of the underlying questions of cell biology, and improves skills inanalyzingand communicatingscientificinformation. Threehours lecture, two hours lab. Prerequisites: BIOL 340 and CHEM 240 with a grade of C - or better; or permission of instructor. Spring.
BIOL 442 Immunology (4) Studies cellular and molecular aspects of theimmuneresponse.Twohourslecture,twohourslab.Prerequisites: BIOL 119, 120, 340 and CHEM 240 with a grade of C or better; or permission of instructor. Spring, alternate years.
BIOL 445 Molecular Biology (4) Considers the molecular aspects of biologyatthecellularandsubcellularlevels.Emphasisonthegenetic material and intercellular processes and laboratory procedures for studying biology at the molecular level. Three hours lecture; three hours lab. Prerequisites: Biology 331 and Chemistry 240, 341 with a grade of C- or better; or permission of instructor. Recommended: BIOL 440. Fall, alternate years.

BIOL 450 Evolution (3) Addresses a variety of topics related to evolutionarybiology, includingthehistory ofevolutionarythought, evolutionofsex, groupselection,speciation, phylogeneticsystematics, coevolution, andmolecularevolution. Threehourslecture. Prerequisite: BIOL 320 with a grade of C - or better or permission of instructor. Recommended: BIOL 119. Spring, alternate years.
BIOL 455 Genomics in Research \& Medicine (4) Examines current toolsandtechniquesingenomicsresearchanddiscussesapplications of genomics, especially in healthcare and medicine. Topics include the use of home genomics kits to infer ancestry and predict health outcomes;genomicsandpersonalizedmedicine;genomicsinspecies conservation and evolution, etc. Students will also use a variety of genomics tools to investigate a novel genomics research problem.
BIOL 460 Special Problems (1) Independent research of a biological problem under the guidance of a faculty member. Prerequisite: permission of instructor. Fall, spring.
BIOL 480 Senior Seminar I (2) Focuses on the interdisciplinary nature of biology and how life sciences relate to contemporary problemsandcircumstances.Involvesinvestigativeprojects, written reports, and presentation ofreviews. Prerequisites:Atleastone400level biology course; senior standing. Fall.
BIOL 481 Senior Seminar II (2) Focuses on interdisciplinary nature ofbiologyandhowlifesciences relatetocontemporaryproblemsand circumstances. Involves written and oral analysis of class material. Prerequisites:Atleastone400-levelbiologycourse; seniorstanding. Spring.
BIOL 482 Biology Senior Seminar (3) Focuses on interdisciplinary natureofbiologyproblemsandcircumstances.Involvesinvestigative projects,writtenreports,presentationofreviews,andintegrativebook reviews primarily in seminar format. Prerequisites: at least one 400level biology class.
BIOL 498 Internship in Biology (1) Internships are designed to meet theeducational needs ofstudents' professional goals andto provide practical experience in a position relating to a specific area of career interest. Developed by the student in conjunction with a faculty supervisor and site supervisor.
BIOL 499 Special Topics in Biology (1) Lectures, discussions, or speciallaboratorytopics notcoveredinregularcourseofferings.Provides greaterdepthtotopics ofspecial interestorexplores rapidlychanging areas in biology. May be repeated. Prerequisites announced when specific topics scheduled.

## British Studies (BRIT)

British Studies courses are taught by the British Studies faculty of Harlaxton College.
BRIT 280 Cultural Capitals of Britain and Europe (3) British Studies Facultytravelbetween BritainandEuropehasshapedandcontinues to shape Britain's national identity. ID 280 considers both historical and contemporary points of cross-cultural and political contact between Britain and Europe. The course is available for General Education credit and for Honors. ID 280 is a journey that runs in parallel with theHarlaxton summer travel program, giving students the opportunity to visit the cultural capitals of Britain and Europe (London, Paris, Rome, Florence, Edinburgh, York, Lincoln, Cambridge) as an informed traveler. London and Lincoln are both required trips. The trips to the othercultural capitals arehighly recommended. Students may have their own plans to visit different cultural capitals in Europe or the UK. Regardless of the destination, rather than simply being a tourist, you will become an observer and commentator able to produce an assessed e-portfolio of your travels and conclusions regarding Britain's relationship with Europe.

BRIT 282 The British Experience From the Celts to Present Day (6) Interdisciplinary introduction to the broad cultural and historical developments within British society from the earliest times to the present.TaughtonlyatHarlaxtonCollegeandrequiredofallstudents attending.
BRIT 382 The British Experience From the Celts to Present Day (6) Interdisciplinary introduction to the broad cultural and historical developments within British society from the earliest times to the present.TaughtonlyatHarlaxtonCollegeand requiredofallstudents attending.

## Business (BUS)

Business courses are taught by the faculty of the Department of Accounting and Business Administration. All courses are subject to the leveling policy and prerequisite requirements of the Schroeder Family School of Business Administration. See the "Schroeder Family School of Business Administration" section of this catalog for the complete leveling policy.
BUS 365 Contemporary European Business Issues (3) Strategic business concepts in the context of the European Union. Multidisciplinary approach to issues related to the European Monetary Union, globalchallengesfacingEuropeanbusiness,andcomparativebusiness and leadership experiences. Students participate in site visits in the United Kingdom to develop understanding of operations of corporationsfromaglobal perspective. Exposuretohistorical and cultural contextofEuropeanbusinesstoenhancebusiness decision-making skills. Conducted at Harlaxton College. Open to majors in accounting, business administration, or economics. Prerequisite: Grade of C- or better in ID 150 or ECON 102.

BUS 380 Special Topics in Business (3) Covers topics not included in other courses to give greater depth in certain areas and to explore currenttopics.Repeatablecourse.Contentchangeseachtimecourse is offered. Prerequisite: Grade of C- or better in ID 150. Offered periodically.
BUS 398 Internship in Business (3) First internship; a structured assignmentinwhichstudentgainspracticalexperienceinabusiness position relatedtoanarea ofcareerinterest.Studentisdirected bythe internship director and supervised by a member of the cooperating organization.A contract(availablefrom the business schools internshipdirector)mustbeapprovedandanofferletterfromtheinternship provider must be on file before registering for course. Sponsoring institutionsmayrequirestudentstohavecompletedspecificcourse(s) in addition to the following prerequisites prior to beginning the internship. Prerequisites: EXED 090; at least one of FIN 361, MGT 311, MGT 377, or MKT 325; permission of the internship director of the Schroeder Family School of Business Administration.
BUS 400 ACES Passport Program (0) The ACES Passport Program providesaroadmapforstudentstodevelopcareeradvancementtechniques and network contacts. All students are required to establish an alumni/career mentor, attend career fairs, and take the EXED 090 course and complete BUS 398. Students are also required to select other professional development activities, including but not limited to, joining a business club, attending career advancement speaker events, networking, and Employer in the Foyer events, conductingmockinterviews, andengaging withemployersatcompany information sessions. Activities will be approved and documented by the Schroeder Family School of Business Administration Career Advancement office. Enrollment limited to students majoring in business or accounting.
BUS 498 Internship in Business (3) Second internship; a structured assignmentinwhichstudentgainspractical experienceinabusiness
position related to an area of career interest. Must be a distinct work experience from that provided by Accounting 398 or Business 398. Creditsearnedapply only as freeelectivecredits.Studentisdirected by the internship director and supervised by a member of the cooperating organization. Enrollment in course must be concurrent with theworkexperience.Acontract(availablefromthebusinessschool's internship director) must be approved and an offer letter from the internship provider must be on filebefore registering for the course. Sponsoring institutions may require students to have completed specific course(s) in addition to the following prerequisites prior to beginning the internship. Prerequisites: Grade of C- or better in ACCT 398 or BUS 398; permission of the internship director of the Schroeder Family School of Business Administration.

## ChangeLab (CHNG)

ChangeLab courses are taught by an interdisciplinary faculty.
CHNG 101 Creative Problem Solving (0-4) This is an experiential learningopportunityinwhichstudentshavetheopportunitytolearn concepts in creative problem solving and apply them in a hands-on format to address a real world challenge. Students will learn creative problemsolvingstylesand processesforproblemdefinition,ideation, andsolutiondevelopment. They willapplyconvergentanddivergent thinking skills in a collaborative team environment to drive innovation.Courseisrepeatableastopicchangeseachtimecourseistaught.

CHNG 105 Dance for Change (3) Learn fundamental bronze syllabus figures in three dances in American Rhythm and Smooth (Rumba, Salsa and Waltz), become familiar with bronze level technique, study the cultural history of the dances, as well as helpadministerUE's MadHotBallroom program, acity-widedancecompetition forelementaryandmiddleschoolstudentsbasedontheaward-winning documentary. Summer.
CHNG 201 The Science of Well-Being (3) This class is the first of twoclassesthathelpstudentsidentifytheirpassionandlearnhowto enact meaningful change in their own life and community. In this first class, participants get an introduction to positive psychology, socialinnovation,socialentrepreneurship,transformativeaction,and thedevelopmentofchangemakers-includinganin-depth portfolio exercisewherethey exploretheirowndreams, passions,talents, and strengths. Fall.
CHNG 280 Social Entrepreneurship (0-4) This course will explore the motivation for social entrepreneurship and the various forms of social ventures. Social entrepreneurship will be contrasted with traditional models of charity and social assistance. This course will examine successes and failures of social ventures,emphasizinghow businessstrategiesandmarketprinciplescanbeusedtoachievesocial goals in ways that are self-sustaining. Students will propose projects that identify new, innovative approaches to address social and environmental problems.
CHNG 300 ChangeLab Project (0-4) This is an experiential learning opportunityinwhichstudentscompletereal-world projectsforstartups or organizations (business, not-for-profit, civic, or educational). Projects have a social responsibility focus. All teams are guided by acoach.Competenciesaredevelopedinprojectmanagement,teamwork, professionalinteraction, and presentationskills.Studentsdraw upondiverseteammemberstrengthstodelivervalueontheirprojects. Course is repeatable.Projectschangeeachtimethe course istaught.
CHNG 310 ChangeLab Project Social Responsibility (0-4) This is anexperientiallearningopportunityinwhichstudentscompleterealworld projectsforstart-upsororganizations(business,not-for-profit, civic, or educational). Projects have a social responsibility focus. All teamsareguided byacoach.Competenciesaredevelopedin project
management,teamwork, professionalinteraction, and presentation skills.Studentsdrawupondiverseteammemberstrengthstodeliver value on their projects. Course is repeatable. Projects change each time the course is taught.

CHNG 320 ChangeLab Project International (0-4) This is an experientiallearningopportunity in whichstudentscompletereal-world consulting projectsforstart-upsorexistingorganizations (business, not-for-profit, civic, or educational). Projects have an international focus and may include international travel. All teams are guided by acoach.Competenciesaredevelopedin projectmanagement,teamwork, professionalinteraction, and presentationskills.Studentsdraw upondiverseteammembersstrengthstocreatevalueontheirprojects. Projects change each time the course is taught.
CHNG 330 Social Innovation Concepts and Application (0-4) This is a course in which students propose their own social innovation project. Projects are completed in teams guided by a coach. Competenciesaredevelopedinsocialinnovation,empathy, creative problem-solving, designthinking,story-telling, projectmanagement, teamwork, and presentationskills.Studentsdrawupondiverseteam memberstrengthstocreateimpactonasocialorenvironmentalissue. Course is repeatable. Projectschangeeach time the course istaught. Prerequisite CHNG-280 and/or permission of instructor.

## Chemistry (CHEM)

Chemistry courses are taught by the faculty of the Department of Chemistry.
CHEM 100 Fundamentals of Chemistry (4) Includes historical developmentofsomefundamentalconceptsillustratingmethodologyand experimental basis of chemistry. Examines impact of chemistry on modernsociety.Creditmaynotbeappliedtosciencemajors.Intended forstudents with littleor nochemistry background. Threehourslecture, two hours lab. Fall.

CHEM 103 The Chemistry of Adult Beverages (3) Introduction to the chemical principles of adult beverages. Fundamental themes of chemistry and biochemistry will be introduced by examining the processes and production of adult beverages. Critical historical and cultural themes will also be explored.

CHEM 108 Elementary Chemistry (4) Considers fundamental concepts of chemistry, organic chemistry, and biochemistry and their applicationsinscience,technology, andsociety.Threehourslecture; two hours lab. Prerequisite: CHEM 100 or two semesters of high school chemistry. Spring.
CHEM 118 Principles of Chemistry (4) Covers principles of stoichiometry,chemicalbondingandstructure,thermochemistry,chemical equilibrium, andkinetics. Threehourslecture,twohourslab.Prerequisite: Two semesters of high school chemistry. Fall, spring.
CHEM 195 Introduction to Chemical Research (1) Participation in a directed research project. Prerequisites: CHEM 118; permission of instructor. Fall, spring.
CHEM 240 Organic Chemistry I (4) Introduction to the structure, nomenclature,andchemistry ofcarboncompounds.Coversallmajor functional group classes and their simple characteristic reactions. Introduces mechanistic considerations as a basis for understanding reactions.Laboratoryincludesbasictechniques,simplereactions,and qualitativeanalysis. Threehourslecture,threehourslab.Prerequisite: CHEM 118 with a grade of C - or better. Spring.
CHEM 280 Inorganic Chemistry I (4) An introduction to the inorganic chemistry of metallic and nonmetallic elements with special attentiongiventotheapplied industrial and biochemical uses oftheir compounds.Surveysthebehaviorofselectedelementsandcoordination compounds. Threehourslecture, three hourslab. Prerequisite:CHEM

240 with a grade of $C$ or better or permission of instructor. Spring.
CHEM 299 Special Topics in Chemistry (1) Lecture, discussion, or labcoursedevotedtoatopicnotcoveredin regularchemistrycourse offerings. Topicsvarydependingoninterestsoffacultyandstudents. Mayberepeated. Prerequisites announced when coursescheduled. Fall, spring.
CHEM 341 Organic Chemistry II (5) Studies the reactions of organic andbioorganicmoleculesorganizedaroundmechanistic principles. Introducesmultistepsyntheses andsyntheticstrategies.Laboratory includes studies of reactions, synthesis, and identification of compounds. Four hours lecture, four hours lab. Prerequisite: CHEM 240 with a grade of C - or better. Fall.
CHEM 351 Physical Chemistry I (4) Introduction to thermodynamics and chemical kinetics as applied to the states of matter, chemical reactions, and chemical equilibria. Three hours lecture, four hours lab. Prerequisites: CHEM 280; MATH 222; PHYS 121 or 210. Fall.
CHEM 360 Quantitative Analysis (4) Studies fundamental principles of chemical analysis and their application. Topics include data handling,chemical equilibrium, gravimetricandvolumetricanalysis,and certain instrumental methods of analysis. Laboratory experiments illustraterealisticexamples ofchemicalanalysis.Threehourslecture, four hours lab. Prerequisite: CHEM 240 or 280 with a grade of C- or better, or permission of instructor. Fall.
CHEM 370 Biochemistry I (3) An introduction to biologically important molecules and their role in biological systems at a cellular level. Three hours lecture. Prerequisite: CHEM 341. Fall.
CHEM 371 Biochemistry I Lab (1) An introduction to important basic techniques used in the biochemistry laboratory. Four hours laboratory. Fall.
CHEM 452 Physical Chemistry II (4) Introduction to quantum theory and statistical thermodynamics. Emphasis on the study of thestructureofsmallmoleculesusingvisible,infrared, andmagnetic resonancespectroscopy.Threehourslecture,fourhourslab.Prerequisites: CHEM 351; MATH 323; PHYS 122 or 211. Spring.
CHEM 461 Instrumental Analysis (4) Studies modern methods of instrumentalanalysis.Topicsincludeelectronicsininstrumentation, spectroscopicmethodsofanalysis,andseparationscience.Laboratory experimentsprovideexperiencewithinstrumentaldesignandoperation. Three hours lecture, four hours lab. Prerequisites: CHEM 341, 351, 360. Recommended: CHEM 452. Spring.
CHEM 473 Biochemistry II (3) A discussion of advanced topics includes biologically important compounds and their role in biological systems at a cellular level. Three hours lecture. Prerequisites: CHEM 280, 360, 370 with grades of C- or better. Spring.

CHEM 474 Biochemistry II Lab (1) An introduction to advanced techniques used in the biochemistry laboratory. Four hours laboratory. Prerequisites: CHEM 370 and 371 with grades of C- or better, must be taken concurrently with CHEM 473. Spring.
CHEM 483 Inorganic Chemistry II (4) Surveys classical and contemporaryapproachestothestudy ofmolecularstructure,chemical bonding,spectra,acid-basechemistry,thesolidstate,and coordination compounds. Three hours lecture, four hours lab. Prerequisites: CHEM 341, 351, 360. Fall.
CHEM 493 Short Topics in Advanced Chemistry (1) Each 4 1/2 week section explores an advanced topic in chemistry. Topics vary, depending on interests offaculty and students. May be offered with or without lab. Fourteen class hours, four lab periods iflab is offered. Prerequisites:Varybutgenerallyincludeseveralupperlevelchemistry courses. Fall, spring.

CHEM 495 Research (1) Involves participation in and completion of an individual research project under the direction of a faculty member.Requireswritten andoral reportoftheliteraturesearchand laboratory work. Prerequisite: Permission of instructor. Fall, spring.
CHEM 498 Internship in Chemistry or Biochemistry (1) Supervised and structured assignment in a workplace or similar setting where studentworkswith chemical orbiochemical professionalsandgains practical experience in a position related to a specific area of career interest.Internshiparrangedinadvancebythestudent, thesitesupervisorandthefacultysupervisor.Prerequisites:Completion ofatleast eighthoursofcollegechemistrycourses;permissionoffacultyadvisor and faculty internship supervisor. Fall, spring, summer.
CHEM 499 Chemistry Senior Capstone (3) Serves as a senior capstoneforstudents majoring inchemistryand biochemistry.Involves resume writing, book reviews, a written thesis, a large group project and presentations.

## Civil Engineering (CE)

Civilengineeringcourses aretaughtbythefaculty oftheDepartment of Mechanical and Civil Engineering. Pre-engineering students and students not admitted to the College of Engineering and Computer Sciencemaynotenrollinanycivilengineering(CE) coursenumbered 200 or above without specific permission of the instructor, chair, or dean.
CE 183 Surveying (3) Introduces students to modern surveying instruments, surveyingmethods, andengineeringgraphics. Includes instruction in measurement of distances, horizontal angles and vertical angles, traverse and differential leveling, mapping, survey computations, andcomputerapplicationsusingAutoCAD.Onehour lecture, five hours lab. Fall.
CE 324 Construction Management (3) Covers basic construction managementfunctions, general principlesofplanning, contracting, scheduling, and costestimating.Also coversconstructionsafety,sustainability, productivity, qualitycontrolandcostaccounting.Includes the use of project scheduling and cost estimation software. Spring.
CE 331 Construction Materials (3) Introduction to civil engineering materials in construction, specifically steel, timber, aggregate, Portland cement concrete, and asphaltic concrete. The focus is on the manufacture, origin, and design of materials; physical and chemical properties of materials; stress-strain behavior of materials up to failure; sustainability of materials and evaluation of materials through destructiveandnondestructivemethods.Hands-onlabsemphasize characterization of physical andmechanical properties ofmaterials, planningandexecution ofexperiments, andinterpretation ofexperimental data. Two hours lecture, three hours lab. Corequisites: CE 331L and ENGR 232 or permission of instructor. Spring.
CE 338 Soil Mechanics and Soil Behavior (3) Covers soil origin, index properties of soil, weight volume relationships, soil classification, principles of effective stress, stress distribution, permeability, seepage,labandfieldcompaction, theoryofconsolidation, elasticand consolidation settlement,timerateofsettlement, and shearstrength of cohesive and cohesionless soil. Prerequisite: ENGR 232, C- or better. Spring.
CE 339 Soil Mechanics Laboratory (1) Experiments in index and engineeringpropertiesofsoilsuchasmoisturecontent,specificgravity, sieveanalysis,AtterbergLimits,permeability,fieldandlabcompaction, consolidation, triaxial, and direct shear. Corequisite: CE 338.
CE 340 Structural Analysis (3) Load determination and tributary area calculations, analysis of statically determinate structures for internalforcesanddisplacements,influencelinetheory,approximate analysistechniques, energy methods, and analysis ofstatically inde-
terminate systems. Prerequisite: ENGR 232 with a grade of C- or better or permission of instructor. Fall.
CE 341 Design of Steel Structures (3) LRFD design of basic structural steelmembers.Includes design forblock shearand shearlag in tension members, lateral torsional buckling and bearing criteria of flexuralmembers, and effectivelength criteriaand baseplatedesign forcolumns.Designofsimpleboltedandweldedconnections.Prerequisite: CE 340. Spring.
CE 342 Design of Concrete Structures (3) Design and analysis of reinforced concrete structural members including rectangular sections for bending and shear. Design of columns for axial load and bending.Rebardevelopmentlength concepts.Prerequisites:CE331 \& CE 340. Fall.

CE 350 Transportation Engineering (3) Covers road vehicle performance, geometric design of highways, empirical pavement design, fundamentals of Superpave, traffic flow, traffic surveys, highway capacity and level of service analysis and fundamental concepts in railwayengineering.Emphasisonlandtransportation. Prerequisites: CE 183; ENGR 213. Spring.
CE 374 Environmental Engineering I (3) Introduction to environmentalengineeringtopics, includingwaterquality, watertreatment processes, air quality, solid and hazardous waste management, and environmentalsustainability.Includesastudyofenvironmentallaws. Prerequisite: CHEM 118 with lab. Spring.
CE 380 Hydraulics Laboratory (1) Experiments in fluid mechanics andhydraulics,includingviscosity,flowmeasuringdevices,momentumforces, turbines, and weirs, andfrictionallosses and pipes. Corequisite: ENGR 366. Fall.
CE 438 Geotechnical Engineering (3) Application of soil mechanics to the design of building foundations, including shallow and deep foundation systems; foundation repair; stability analysis of earth slopes; lateral earth pressures and design of retaining walls. Also includessubsoilexplorationandseismicsitecharacterization.Prerequisite: C- or better in CE 338 or permission of instructor. Fall.
CE 443 Intermediate Structural Analysis (3) Analysis of statically determinateandindeterminatestructures using forceand displace-mentmethodssuchasenergymethods,stiffnessmethod,slope-deflection relationships, moment distribution, and matrixtechniques. Settlement and sideway calculations are considered throughout. Prerequisites: CE 340.
CE 449 Advanced Structural Design (3) Advanced topics in structural design including steel connections, plate girders, composite beams,steelandconcreteframes,two-wayslabs,andreinforcedconcrete foundations. Prerequisites: CE 341, 342.
CE 450 Advanced Pavement Design \& Management (3) Application of mechanistic empirical methods for flexible and rigid pavement design, perpetual design of pavements, design ofcontinuouslyreinforced concrete pavements, airfield pavement design, network \& project level pavementmanagement, distresses in rigidand flexible pavements,distresssurveys, pavementmanagementsystemdevelopment, maintenance strategies for rigid and flexible pavements, and newandemergingtechnologiesinpavementdesign,managementand rehabilitation practices. Prerequisite: CE 350.
CE 468 Engineering Hydrology (3) Study of the hydrologic cycle, watershed characteristics, unit hydrographs, stream flow analysis, groundwaterhydrology,floodfrequencyanalysis,floodhydrographs, routingmethods, and hydrologicdesignusing computersimulation models. Prerequisite: ENGR 366.
CE 469 Design of Hydraulic Structures (3) Design methods for open channels, spillways, outlet works, and conduits. Water distribution
system design and pipe network analysis. Design of drainage structuressuchasinlets,stormdrainpipes, detentionandretentionbasins, and culverts. Prerequisite: ENGR 366. Fall.
CE 475 Environmental Engineering II (3) Design and analysis of unit operationsand processesforwaterandwastewatertreatment.Topics include physical, chemical, and biological unit processes. Design of sewer networks. Analysis of water treatment plant processes and wastewater treatment plant facilities. Prerequisites: CE 374; ENGR 366; Or permission of the instructor.
CE 495 Civil Engineering Design Project I (3) Introduces concepts of project management, business, public policy, globalization, and leadership,theimportanceofprofessionallicensure,professionaland ethical responsibility, and skills such as technical writing, time management, teamwork, and negotiations. Selection of senior project, incorporating appropriateengineeringstandards, multiple realistic constraints, and sustainability concepts. Written and oral presentation of preliminary work. Prerequisites SeniorStanding, as indicated by concurrent enrollment in CE 342, CE 438, and CE 469 or permission of the instructor.
CE 497 Civil Engineering Design Project II (3) Completion of project selected in Civil Engineering 495. Design plans and a formal written reportcoveringall phasesofthe projectarepreparedandsubmitted. Oral presentation of the design before peers, professional sponsors, and faculty. Discussion of the projects impact on the environment, compliancewithengineering codes,standards,andsociety.Prerequisite: CE 495.

CE 498 Independent Study in Civil Engineering (1) Independent study oftopic of interesttothestudent.Requiresfacultysponsorand approved detailed study plan of proposed topic.
CE 499 Special Topics in Civil Engineering (1) Study of topics of special interest. Topics will be announced. Repeatable course. Content changes each time course is offered. Prerequisite will be announced when scheduled.

## Cognitive Science (COGS)

Cognitivesciencecoursesaretaughtbythefaculty ofseveraldepartments.
COGS 100 Proseminar in Cognitive Science (0) Explores current issuesincognitivescienceinsofarastheyarepertinenttotheinterests ofstudentsasindividuals.Facilitatesoral presentationskillsbyhaving studentsmakeshortpresentationsandreceivingfeedbackfromother students and the instructor. Grading for the course will be pass/fail. Students may take the course for 1 hour of credit no more than three times. Freshmen should enroll in COGS 100, sophomores in COGS 200, juniors in COGS 300, and seniors in COGS 400. Prerequisite: A declared major in cognitive science.
COGS 111 Introduction to Cognitive Science (3) Introduces basic concepts, issues, and methodologies associated with the study of human cognition. Insights appropriately drawn from several fields including biology, computer science, philosophy, and psychology.
COGS 200 Proseminar in Cognitive Science (0-1) Explores current issuesincognitive scienceinsofarastheyarepertinenttotheinterests ofstudentsasindividuals.Facilitatesoralpresentationskillsbyhaving studentsmakeshortpresentationsandreceivingfeedbackfromother students and the instructor. Grading for the course will be pass/fail. Students may take the course for 1 hour of credit no more than three times. Freshmen should enroll in COGS 100, sophomores in COGS 200, juniors in COGS 300, and seniors in COGS 400. Prerequisite: A declared major in cognitive science.
COGS 292 Internship in Cognitive Science (1) Offers students the opportunity for supervised field experience in teaching or research
eitheroncampusoratsomeotherfacilityappropriatetothestudent's field of study. Repeatable for credit.
COGS 300 Proseminar in Cognitive Science (0-1) Explores current issuesincognitivescienceinsofarastheyarepertinenttotheinterests ofstudentsasindividuals.Facilitatesoral presentationskillsbyhaving studentsmakeshortpresentationsandreceivingfeedbackfromother students and the instructor. Grading for the course will be pass/fail. Students may take the course for 1 hour of credit no more than three times. Freshmen should enroll in COGS 100, sophomores in COGS 200, juniors in COGS 300, and seniors in COGS 400. Prerequisite: A declared major in cognitive science.
COGS 345 Complex Systems \& Cognition (3) Studies dynamics involvedinanimal (humanand non-human) and machine cognition fromacomplexsystemsperspective.Focusesonbothinternalsystems ofcognitiveagentsandtheircollectivebehavior.Specifictopicsmay includeneuralnetworks,sensoryandmotorsystems,environmental andagent-to-agentrelations, and the roleofconstraints in cognitive behavior.Includesacomputermodelingcomponent,butnoprevious knowledgeofmathematicsorcomputerprogramming is necessary. Prerequisite: Major or minor in Cognitive Science or permission of the instructor.
COGS 400 Proseminar in Cognitive Science (0-1) Explores current issuesincognitivescienceinsofarastheyare pertinenttotheinterests ofstudentsasindividuals.Facilitatesoral presentationskillsbyhaving studentsmakeshortpresentationsandreceivingfeedbackfromother students and the instructor. Grading for the course will be pass/fail. Students may take the course for 1 hour of credit no more than three times. Freshmen should enroll in COGS 100, sophomores in COGS 200, juniors in COGS 300, and seniors in COGS 400. Prerequisite: A declared major in cognitive science.
COGS 492 Internship in Cognitive Science (1-3) Offers students the opportunity for supervised field experience in teaching or research eitheroncampusoratsomeotherfacilityappropriatetothestudent's field of study. Prerequisite: At least two courses in cognitive science, philosophy, psychology or computer science. Repeatable course.
COGS 498 Seminar in Cognitive Science Psychology (3) Explores a specificinterdisciplinary topicthat is pertinent to the contemporary studyofcognitionandbehavior.(Coursemayberepeatedforcreditas topicchanges;however, itmaybecountedonlyonceasarequirement towardthecognitivesciencemajor.) Prerequisite:Fourothercourses in cognitive science, philosophy, psychology, or neuroscience.
COGS 499 Independent Study in Cognition and Behavior (1) Offers research on special problems or persons under the direction of an individualfacultymember.Prerequisite:Permission ofthedirectorof the cognitive science program.

## Communication (COMM)

CommunicationcoursesaretaughtbythefacultyoftheDepartment of Communication.
COMM 130 Introduction to Communication (3) Introduction to the fundamental questions, methods, and theories that define the communicationdisciplineandprofessionsinadvertising,journalism, publicrelations,multimedia production, andorganizationalcommunication.
COMM 210 Professional Speaking (3) This course focuses on a variety of presentations
COMM 211 Advertising \& Promo Strategy (3) Focuses on the practicalandcreativeskillsnecessaryforadvertisingprofessionals.Students learnbroadfundamentalsofadvertising, includingbrand positioning, copywriting and media placement. An introduction to marketing research is included, allowing students to learn how to create adver-
tising that sells based on qualitative and quantitative research. How advertising fits into an overall integrative communication plan will be discussed. Prerequisite: COMM-130 or permission of instructor.
COMM 220 Principles of Public Relations (3) This course is intended toofferstudentsanoverviewofthefield ofpublicrelations. Students willlearnbasicpublicrelationsconceptsand processes includingthe evolution ofpublicrelations;publicrelationsincorporations, governmentandinstitutions;publicopinion;targetaudiences;andethicsof public relations.
COMM 221 Media Writing (3) Develop basic writing and research skills necessary for creating persuasive tools in print, broadcast, and online media. Special focus on developing a competency in the mechanics ofconciseclearwritingthroughappropriateuseofAssociated Press style. Prerequisite: COMM 130 or permission of instructor.

COMM 231 Basic Reporting (3) Basic news gathering, writing reporting, and editing skills relevant to journalism and mass communication.Examinesthenewsselectionprocessandfocusesonthe principles of news writing and reporting, construction of the news story to include lead writing, Associated Press style, and ethical and legal issues. Emphasis on interviewing and research skills. Prerequisite: Communication 130 or permission of instructor.
COMM 240 Live Events (3) From running the camera to producing fromthetruck, thiscourseteachesstudentsthenecessaryskillstobe part of a live event broadcast, and offers hands-on opportunities to apply those skills in real-world settings. Fall.
COMM 251 Principles of Multimedia (3) Introduces basic concepts ofWebsitedevelopment,videoproduction, andPhotoshop. Prerequisite: COMM 130 or permission of instructor.
COMM 312 Advertising Copy and Layout (3) Advanced techniques inmessagecreation,emphasisonadvertisingcampaigndevelopment and presentation. Covers product and audience research, creative strategystatements, ideagenerationtechniques, computerassisted layouts, preparation ofa professional portfolio,andjobhuntingstrategies. Prerequisite: COMM 211.
COMM 314 Advertising and PR Campaigns (3) Details the establishmentofadvertisingandpublicrelationsstrategies,andtheexecution andevaluation ofoutcomesusingresearch-basedgoals.Studentscreate and carry out a campaign for a real-world client. Course offers an opportunityforstudentstointegratepriorlearningandproblem-solvingforacomprehensivecampaignplanwhichincorporatestraditional and new media platforms. Prerequisites: COMM 211.
COMM 322 Strategic Public Relations (3) Includes the historical evolution of public relations with in-depth instruction on the concepts of public opinion, audience analysis, and persuasion. Professional,ethical, andlegalresponsibilities of publicrelationsexamined. Emphasis on use of communication strategies to achieve organizational goals and objectives. Covers applications of public relations in a global environment. Prerequisite: COMM 220, 221.
COMM 325 Sports Promotion (3) This course covers relationship management within the sports industry, including sponsorship (endorsementandlicensing).Studentswillgainskills in researchand marketsegmentation, marketing mix consideration, ticketsales and special events. Prerequisites: COMM 130, 221 and 231.
COMM 332 Advanced Writing (3) In-depth instruction and critiques ofstudent'sjournalisticworkdonewith differentreportingmethodologiesincludinginterviewing, officialrecords, directand participant observation, andsurveyresearch.Emphasisonhowtocoverspeeches and meetings and report on local government. Prerequisite: COMM 231.

COMM 333 News Copyediting (3) Overview of the skills and uses of editing.Emphasizesthepracticeofcopyeditingandheadline-writing skillsforprintandonlinepublications.Skillsdevelopedincludetightening writing, sharpening leads, headline writing, cutline writing, and basics of layout. Prerequisite: COMM 231.
COMM 335 Sports Writing (3) This writing-intensive course helps students gainskills in sportsjournalism through various storyforms, including newspapers, magazines and social media. Students will explore human-interest stories with social significance and gain understanding of the role of sports in society. Prerequisites: COMM 130, 221, and 231.
COMM 345 Video Production (3) The focus of this class will be on understandingthekeyprinciplesandcharacteristicsofvideoproduction - from concepts to the final edit. Prerequisite: COMM 251. Fall.
COMM 351 Web Design (3) Introduces the basic concepts of website development.UtilizesHTMLandappropriatetextand graphics softwareapplicationstobuildwebsites.Includesoverviewofbasicdesign, writing, andinformationarchitectureprinciplesthatapplytowebsite development. Prerequisite: COMM 251. Fall.
COMM 352 Multimedia Strategies (3) Advanced techniques in Web sitedevelopment, including conceptofdynamicHTML.Includesthe integrationofvideoandaudioaswellasworking withtheFlashapplicationforintegratinginteractivemultimediaelements. Prerequisite: COMM 251 and 350.

COMM 380 Intercultural Communication (3) Examines the communication process of individuals from different cultures or subcultures.Explorespossiblesources ofmisunderstandingsinintercultural communication (e.g., time/space factors, linguistic and nonverbal factors, ethnocentric communication, communication problems of persons engaged in personal or professional intercultural contacts).
COMM 381 Relationship Management (3) Critical examination of research and theories dealing with selected variables in one-to-one relationships. Explores development, maintenance, and deterioration stages of professional and personal relationships. Prerequisite: COMM 130 or permission of instructor.
COMM 382 Team Building and Group Communication (3) Theoretical foundations and practical skills for examining and applying communication principlesingroups.Surveysconceptssuchascohesiveness,leadership,groupthink, deviance, networks, choiceshift, and brainstormingastheyrelatetocommunication. Prerequisite:COMM 130 or permission of instructor.
COMM 383 Conflict Management (3) Examination of the factors that lead to conflicts, and theory and practice in using communication strategies to resolve conflict. Prerequisite: COMM 130 or permission of instructor.
COMM 388 Organizational Communication Models (3) Application ofthetools ofcommunication in anorganization. Topics include informationflow, motivationandinfluence, power,leadershiptransactions, networks, channels, teamwork, and territoriality. Prerequisite: COMM 130 or permission of instructor.
COMM390 Practicum (1) Supervised practical experience in student mediaorotheruniversityinformationoutlets.Mayberepeatedforup to three hours credit. No more than six hours total credit given for COMM 390 and 395 combined.
COMM391 Professional Development(1)Supervised practicalexperience in student media orother university information outlets. May be repeated for up tothreehours credit. No morethansixhourstotal credit given for COMM 390 and 395 combined.
COMM 395 Internship (1) Supervised practical experience in an off-campus mass communication related organization. Application
required.May be repeatedforup to threehourscredit. Prerequisites: one course from COMM 211, 221, 231, 251, 341; GPA of 2.50 or better; 36 hours of completed academic credit.

COMM 410 Health Communication (3) Provides students the opportunitytolearnhowcommunicationindifferentcontexts(interpersonal, organizational, mediated, etc.) can be utilized effectively to promote physical, mental andsocial well-being.Contexts include provider-patientcommunication,communicationinhealthcareorganizations,riskcommunicationandnewmediatechnologies relatedto health communication.
COMM 450 Multimedia Portfolio (3) The focus of this class will be onunderstandingthekeyprinciplesandcharacteristics ofvideoproductionandbuildingaportfolioofmaterialthatwill preparestudents to succeed in the field after graduation. Prerequisite: COMM 352 or permission of instructor. Spring.
COMM 483 Media Theory and Research (3) Introduction to theory and research in the field of mass media. Examines the role of mass media in modern society and the influence of media institutions andmessages on individuals, communities, and society. Includes an overviewofbasicresearch methodsassociated with mediaresearch. Studentsintegratetheoretical knowledgeintomediaresearchareas relevanttocommunication professionalstoday. Prerequisite:Junior or senior standing.
COMM 485 Media Law and Ethics (3) Examines the rights, responsibilities, and constraints on public communication in the United States. Emphasis on the effects and interaction of differing ethical constructsandFirstAmendmenttheories andsources of constraints onthe mass media. Covers regulatory policies affecting advertising, public relations, journalism, and present and future electronic mass mediums.Alsoexamineslegalareasoflibel, privacy,obscenity,access to and ownership of information, and media outlets. Prerequisite: Junior or senior standing.
COMM 488 World Media Systems (3) The focus of this class will be tohelpstudentsidentifyandunderstandthekeyelementsthatdefine and influence media systems around the world. These will include specific philosophies of media systems, the state's relationship with media, how the media isfinanced, accessibility of the media, and the influence of culture on media audiences. Specific attention will be given to the process of media globalization and how media imports andexportsinfluencevariousmediasystems. Studentswill havethe opportunitytoanalyzespecificmediasystemsthroughcomparative analysis allowing them to not only have a broader understanding of the variety of media systems around the world, but also to developa greaterappreciationforthefactorsthatinfluencethedevelopmentof the media system of the United States.
COMM 490 Special Topics in Communication (3) Varied topics of periodic interest not covered in regular course offerings. May be repeated. Prerequisite:Seniorstandingand permission ofinstructor.
COMM 499 Independent Study in Communication (1) Completion of individual course of study under faculty supervision. Topic and credithoursmustbeapprovedinadvanceinaccordancewithUniversity policy. May be repeated twice for up to six hours credit.

## Computer Science (CS)

ComputersciencecoursesaretaughtbythefacultyoftheDepartment of Electrical Engineering and Computer Science. Pre-engineering studentsmaynotenrollinanycomputer science(CS) coursenumbered 206orabovewithoutspecific permission ofaninstructor,chair,ordean.
CS 101 Introduction to Computer Science (3) Hands-on introduction to computerscienceandengineering.Meets with electrical and computer engineering sections of Engineering 101. Includes short
introductions to programming, robotics, and sensors. Fall.
CS 105 Survey of Computer Science (3) Intended for students who are not computer science or engineering majors. Provides broad introductiontovariousconceptsandtoolsusedincomputing.Topics includenumbersystems,Booleanalgebra,problemsolving,computability, databases, networking, Internet/Web, user interfaces, artificial intelligence, robotics, and short introduction to programming. Background should include two semesters of high school algebra. Credit not given for more than one of CS 101 or 105 or ENGR 101.
CS 205 Programming for the Sciences (3) Explores the power and limitations of using computers in the sciences. Includes the study of various approachesto solvingscientific problems such as numerical representations, computational numerical methods, and scientific simulations.Coursemaynotbecountedtoward graduationforcomputer science or engineering majors. Prerequisite:MATH 134 or 221.
CS 210 Fundamentals of Programming I (3) Emphasizes prob-lem-solving techniques used in the analysis and design of software solutions, including structuredtop-downdesign, abstraction, good programmingstyle,debugging,andtesting.Programmingconstructs covered include control structures, functions, and basic, and aggregate data types. Introduction to recursion and dynamic allocation. Fall, spring.
CS 215 Fundamentals of Programming II (3) Project and prob-lem-solving course emphasizes the use of classes for encapsulation of abstract data types and abstract data structures. Topics include classes, templates, dynamic allocation, searching and sorting, recursion, and exception handling. Introduction to algorithm analysis. Prerequisite: Grade of C- or better in CS 210. Fall, Spring.

CS 220 Logic Design and Machine Organization (3) Introduction to logic design and computer hardware concepts. Topics include Booleanalgebra, numberrepresentations,sequentiallogic, counters andregisters, microcomputer architecture, and assembly language programming. Spring.
CS 290 Object Oriented Design (3) In-depth study of abstract data types andobjects, including inheritanceand polymorphism, frameworksanddesign patterns,andtheuseoftheseprinciplesin problem solving and program design. Prerequisite: CS 215. Spring.
CS 310 Puzzle Programming (1) Study of problem solving under timepressure.Simulation ofthe programmingcontestenvironment. All problems considered come from past programming contests. Highly recommended for any student interested in programming competitions. Prerequisite: CS 215 or permission of instructor. May be repeated for up to three credit hours. Fall.

CS 315 Algorithms and Data Structures (3) Design and implementation of algorithms and advanced data structures with attention to complexityandspaceanalysis.Problem-solvingstrategies including greedy and divide-and-conquer algorithms as well as dynamic programming techniques. Prerequisites: CS 215, MATH 370. Spring.
CS 320 Computer Architecture (3) Studies the architecture of computer systems from four-bit machines to supercomputers. Memory systems, I/O processors, and multi-computer systems are studied in detail. RISC, CISC and Neural Nets are introduced. Establishes the relationship of hardware and software. Includes hands-on projects dealingwithgraphicaluserinterfacesandtheirimplementation.Prerequisites: CS 210; CS 220 or EE 254. Spring.
CS 350 Computer/Human Interaction (3) Study of user interface design, including ergonomic factors. Includes hands-on projects dealing with graphical user interfaces and their implementation. Prerequisite: CS 215.

CS 355 Computer Graphics (3) Fundamental course in com-
putergraphics.Topicsincluderenderingtwoandthree-dimensional images, two and three-dimensional transformations, line clipping, hiddenlines,shading, and perspective projections.Prerequisites:CS 215; MATH 323.

CS 375 UNIX System Programming (3) Coverage of UNIX software development and UNIX administration. Includes discussion of common shells and scripting languages, X Windows, and interprocess communication. Prerequisite: CS 215.
CS 376 Small Computer Software (3) Introduction to graphical user interface provided by Windows(TM) operating system using C\#.NET. Topics include console applications, windows forms, elementary graphics, ASP.Net web forms, ADO.NET, TCP/IP connection between computers, and dynamic-link libraries (DLLs), and/or device drivers. Prerequisites: ENGR 123 or CS 210; EE 254 or CS 220. Same as EE 356. Fall.

CS380ProgrammingLanguages(3)Comparativeanalysis ofselected high-levellanguages.Coversvirtualcomputersrepresentedbyvarious programminglanguages,representationofdatatypes,sequencecontrolconstructs, dataaccess,scoping,typing systems, runtimestorage management,languagessemantics,alternative, programming paradigms, and parallel language constructs. Prerequisite: CS 215. Fall.
CS 381 Formal Languages (3) Models of computation including finite automata, regular grammars, regular expressions, pushdown automata, context-freegrammars, Turing machines, computability, and undecidability. Prerequisites: CS 210; MATH 370. Fall.
CS 390 Software Engineering (3) Study of the software design and development process in the context of a large group-programming project. Topics covered include: project management, software management, requirements and specifications methods, software design and implementation, verification and validation, aspects of softwaretestinganddocumentationstandards,technicaldocuments, contracts, risks, and liabilities. Prerequisite: CS 215. Recommended: CS 290. Fall.

CS 391 Software Engineering II (3) A continuation of CS-390 Software Engineering. Real-world experience developing a large-scale, ongoing software applications for external clients. Topics covered include: project management, quality assurance, and expectation management. Prerequisite: CS 390. Spring.
CS 395 Software Project Management (3) Issues and techniques for managing software projects. Projectevaluation, scope management,stakeholdermanagement,riskassessment,scheduling,quality, rework, negotiation and conflict management. Ethics of software development.Prerequisite:CS390eitherpreviously orconcurrently.
CS 413 Software Security (3) Provides a systematic treatment for software design and implementation to create computer programs andapplicationsthataresecure.Types ofvulnerabilities andsecurity issues involving software implementation and as well as web, cryptographic, and networking applications are identified and solutions providedincludingsoftwaredevelopmentlifecyclemodelsthatincorporatesecurity.Prerequisite:CS390eitherpreviouslyorconcurrently.
CS 415 Cryptography (3) Introduces conventional and public-key cryptography, cryptosystemssuchasDES and RSA, and applications of cryptography to network and system security. Prerequisites: CS 215; MATH 370.
CS 430 Artificial Intelligence (3) Basic ideas and techniques underly-ingthedesignofintelligentcomputersystems.Topicsincludeheuristicsearch, problemsolving, gameplaying,knowledgerepresentation, logical inference, and planning. Advanced topics such as robotics, expertsystems,learning, andlanguage understandingastimeallows. Prerequisite: CS 215. Recommended: CS 315, 380.

CS440 Databases(3) Presents database concepts and architectures. Topics include basic file structures, data dictionaries, data models, languages for data definition and queries, and transaction managementfordatasecurity, concurrencycontrol, and reliability. Hands-on experience with database and query systems. Prerequisites: CS 215; MATH 222.

CS 445 Programming in the Large (3) Techniques for scaling software to large numbers of users. Topics will include web application programming, databasescalingtechniques, using web services and APIs, virtualization and containers. Prerequisite: CS 380.
CS 455 Advanced Computer Graphics (3) Advanced course in computergraphics.Topicsincluderastergraphics,texturemapping,curve approximation, and ray tracing. Prerequisite: CS 355.
CS 470 Operating Systems (3) Components of operating systems. Taskingand processing, processcoordinationandscheduling,memory organization and management, device management, security, networks, distributed and real-time systems. Prerequisite: CS 215. Recommended corequisite: CS 320. Spring.
CS 472 Concurrent \& Parallel Programming (3) The various programming models used for parallel architectures. Topics will range from concurrent programming on clusters, to multi-core programming, to highly parallel and GPU programming. Parallel algorithms and strategies. Prerequisite: CS 470.
CS 473 Mobile Application Development (3) Hands-on, project-oriented course that explores the principles and tools involved in the design and construction of applications for mobile devices. Topics include and overview of mobile application development, application architecture, managing application resources, designing user interfaces, data storage options, integrating audio and video, and location-basedservices. Each offering will concentrateonone ofthe currentmobileplatforms.Repeatablecoursefordifferentmobileplatform content. Prerequisite: CS 215. Recommended: CS 290.
CS 475 Networks (3) Digital data communication systems in hardwareandsoftware,synchronousandasynchronouscommunication, standards, protocols, networkconfigurations, networkapplications. Prerequisites: CS 215; MATH 222.
CS 478 Embedded Systems and Real-Time Programming (3) Covers real-time programming techniques that are commonly used on embedded systems. Topics include real-time operating system concepts, concurrentprogrammingandtaskschedulingalgorithms, mutual exclusion and synchronization methods, and interprocess communication. Students gain real-world experience by writing applicationsfortwo popularembeddedoperating systems.Prerequisites: EE 354 or CS 215; or permission of instructor. Same as EE 458. Spring.

CS 491 Software Quality Assurance (3) Various aspects of software quality assurance. Dynamic analysis approaches, such as assertions and testing. Static analysis approaches such as reviews and verification.Emphasisonvarioustestingtechniquessuchasunit, integration, system, acceptanceandregressiontesting.Corequisite:CS390either previously or concurrently.
CS 494 Senior Project Seminar Programming (0) Provides guidance fortheselection ofatopicfortheseniordesignproject.Projects(some industry-sponsored) are presentedforstudentselection. An outline andshortpresentationoftheprojectselectedisrequired.Prerequisite: 12 hoursof300-levelcomputersciencecourses.Computerengineers may substitute EE 494. Spring.

CS 495 Senior Project Phase I (3) Plan the computer science project and formulate the preliminary design under the guidance offaculty and industrial advisors. Discussion of the relationship of computer
scienceasadisciplinetothehumanitiesandsocialsciences.Preparation of a written formal proposal and an oral presentation oftheproposal.Seminarsessionaddressesethical,environmental,economic, safety,andergonomicaspects ofcomputerscience.Writtenreactionto seminar topics. Prerequisites: CS 494; GPA of at least 2.0. Computer engineers may substitute EE 495. Fall.
CS 497 Senior Project Phase II (3) Student completes and builds the design proposed in CS 495. A formal design review is conducted early in the semester. A practice oral report, a written final report, a final oral report, and a demonstration of the completed project are required. Prerequisite: CS 495. Computer engineers may substitute EE 497.

CS 498 Independent Study in Computer Science (1-3) Independent study ofatopicofinteresttothestudent.Requiresfacultysponsorand approved detailed study plan.
CS 499 Special Topics in Computer Science Programming (1-3) Study of topics of special interest. Topics will be announced. May be repeated. Prerequisites will be announced when scheduled.

## Cooperative Education (COOP)

COOP 081 Concurrent Co-Op (0-1) Part-time employment in a professionalorparaprofessional roleassociated withthestudent'smajor. Requires full-time student status, prior approval of the job description by the co-op director and submission of a written summary and evaluationoftheworkexperience.Studentsareexpectedtowork8-15 hours perweek. Atleast 10 weeks of workmustbecompleted during the semester. May be repeated. Co-requisite: 12 hours of enrolled credit during the fall and spring.
COOP 091 Professional Practice (0-1) For co-op students only. Students register for Cooperative Education 9X during the Xth co-op work period (e.g., Cooperative Education 93 during the third work period). Requires satisfactory work performance and written co-op work report.

COOP 092 Professional Practice (0-1) For co-op students only. Students register for Cooperative Education 9X during the Xth co-op work period (e.g., Cooperative Education 93 during the third work period). Requires satisfactory work performance and written co-op work report.

COOP 093 Professional Practice (0-1) For co-op students only. Students register for Cooperative Education 9X during the Xth co-op work period (e.g., Cooperative Education 93 during the third work period). Requires satisfactory work performance and written co-op work report.

COOP 094 Professional Practice (0-1) For co-op students only. Students register for Cooperative Education 9X during the Xth co-op work period (e.g., Cooperative Education 93 during the third work period). Requires satisfactory work performance and written co-op work report.

COOP 095 Professional Practice (0-1) For co-op students only. Students register for Cooperative Education 9X during the Xth co-op work period (e.g., Cooperative Education 93 during the third work period). Requires satisfactory work performance and written co-op work report.

## Criminal Justice (CJ)

Criminal justice courses are taught by the faculty of the Department of Law, Politics, and Society.
CJ 205 Introduction to Criminal Justice (3) Views crime and crime controlinhistoricalandsocietal context.Explorestheextentofcrime and its impact on modern society. Explores causes of crime and
the development and operation of the criminal justice system with emphasis upon constitutional restraints. Explores the police, court, and correctional system.
CJ 210 Deviance and Crime (3) Examines deviance through a number of sociological and other perspectives.
CJ 301 Special Topics - Criminal Justice (3) Topics chosen on the basis of programmatic need or student interest. Prerequisite:CJ 205 or 210.
CJ 342 Criminal Law (3) Studies both substantive and procedural law including specific topics in each. Prerequisite: CJ 205 or LS 125.

CJ 354 Introduction to Forensic Science (3) Studies the organization and functions of investigative agencies, basic considerations in the investigation of crime, collection and preservation of physical evidence, andtheapprehension process. Prerequisite:CJ205 orpermission of instructor.

CJ 360 The Correctional System (3) Explores the entire correctional process:historyanddevelopment,probationandparole,institutional corrections, and communitybasedcorrections. Prerequisites:CJ205; SOC 105, 210; or permission of instructor.
CJ 370 The Police (3) Survey of the organization and functions of police agencies, focusing on law enforcement, peacekeeping, and public service responsibilities. Prerequisites: CJ 205; SOC 105, 210; or permission of instructor.
CJ 380 Courts and Justice (3) Introduction to the American court system. The role ofthe criminal courts emphasized. Prerequisites:CJ 205; LS 125; or permission of instructor.
CJ410JuvenileDelinquency (3)Studiesthenature,extentandcauses of juvenile crime, at-risk behavior and child abuse. The juvenile justicesystemandmethods of prevention, treatmentandcorrection are analyzed. Prerequisites: CJ 205; SOC 105, 210; or permission of instructor.
CJ 420 International Crime and Justice (3) Focuses on international criminals and a cross-cultural examination of criminal justice systems. Also deals with the relationship between international crime and crime in the United States. Prerequisites: CJ 205; SOC 105, 210; or permission of instructor.
CJ 440 Criminal Justice Ethics (3) This course provides an overview and exploration of the study of ethics as they relate to the criminal justice system. The course begins with a broader approach and examination of general ethics and morality and then applies ethical frameworks to issues of crime and justice. Specific attention is paid to issues surrounding law enforcement, the law and courts, and corrections issues-especially issues surrounding the punishment of criminals. Prerequisites: CJ 205 or CJ 210/SOC 210; or permission of instructor.

CJ 450 Senior Seminar in Criminal Justice (3) Students complete an original research paper that uses data gathering and interpretive skills. Course content includes the general topics of social organization, socialchange, and social stratificationasthey relatetotheworld cultures courses. Prerequisite: SOC 343, 344 and criminal justice or sociology major; or permission of instructor.

CJ 496 Internship (1-6) Internships available to majors of junior or senior standing who have completed core courses. GPA requirements must be met and student must file an internship application with advisor. Prerequisites: Criminal justice major; junior or senior standing.

## Discussion (DISC)

Discussion groups are sponsored by faculty members from various Universitydepartments.Thesegroupsareorganizedthroughoutthe
academic year, and are available for academic credit.
DISC 100 Journeys \& Discoveries (1) This discussion class is designed to encourage new UE students who are undecided about their academic major to examine their own journeys and discoveries as college students, including their explorations of new subjects throughgeneraleducationclasses, readingsandactivitiesoutsidethe classroom. The course will feature readings about personal quests, focused exploration of majors, opportunities to talk with faculty from various disciplines, attendance at cultural events that broaden students' perspectives, andinteractionwithCareerServicesandother relevant student support services. Class discussion and oral reports are required. A grade of P for passing or a grade of F for failure will be assigned upon completion. Enrollment is limited to entering studentswhohavenotdeclaredanacademicmajor.Learningobjectives include practice in critical reading, thinking and discussion.
DISC 110 Student Success Strategies (1) This course is designed for freshman or those transferring to the University. The goal of this course is to increase students' college knowledge by providing academic and social support as they begin their UE college career. Topics include:time-managementand balancing, campusacademic resources, careerservices,strategiesforplanning andachievingacademicandcareergoals,andcampus policiesand procedures.Falland spring.
DISC 300 Faculty Sponsored Discussion Group (1) Provides a forum in whichteachers and students meet in small groupsto discuss readingseach week.Mayberepeatedforatotal ofthreecredithourstobe used as free elective creditonly. A grade of Pfor passing or a grade of Fforfailurewillbeassigneduponcompletion.Eachdiscussiongroup centersonasingletopic.Studentsarerequiredtoreadone-and-a-half to two hours per week and then meet for one hour per week with the group (including a faculty member) to discuss the reading assignment. Students are limited to one discussion group enrollment per semester. Prerequisite: Permission of instructor.

## Economics (ECON)

Economics courses are taught by the faculty of the Department of Accounting and Business Administration. All courses are subject to the leveling policy and prerequisite requirements of the Schroeder Family School of Business Administration. See the Schroeder Family School of Business Administration section of this catalog for the complete leveling policy.
ECON 101 Principles of Macroeconomics (3) Macroeconomics is thebranch ofeconomicsthatstudiesthedomesticeconomicsystem as a whole and its interaction with foreign economies. This course focusesonthebehavioroftheaggregateeconomyasitpertainstothe determination ofnationalincome, production,levelofemployment, general pricelevel, and traceflows. Particularattention is devoted to fiscal policy and monetary policy and their respective impact on the economic system. Satisfies Outcome 9.
ECON 102 Principles of Microeconomics (3) Markets are among the oldestsocial institutions knowntoman.Microeconomics is a branch of economics that studies the dynamics of individual markets and prices.Focusesonthebehavior of producersandconsumers and the interdependence in the market process. Pays particular attention to thestructureandevolutionofcompetitivemarkets.SatisfiesOutcome 9. ECON 101 is not a prerequisite.

ECON 300 Regression Analysis (3) Second course in applied statistics for students in economics and other social sciences, business administration, mathematics, or natural sciences. Topics include simple and multiple regression analysis, extensions of the classical regressionmodel,and problemsassociatedwithforecasting.Assigned workexposesstudentstoproblemsfromawiderangeofapplications.

Thiscourseincludesintroductiontoeconometricsoftwareandexperiments involving a variety of realworld data sets. Prerequisite:Grade of C- or better in QM 227 or another course in principles of statistics. Offered alternate fall semesters.
ECON 320 Environmental Economics (3) The content in this course usesconceptslearnedin principlesofmicroandmacroeconomicsto examinecausesandevaluatepolicysolutionstoenvironmental problems such as air and water pollution, climate change, and depletion of natural resources. This class teaches important concepts in envi-ronmentaleconomicssuchasexternalities,cost-benefitanalysis,and the valuation of non-market goods. Class material draws both from thetextbookandfromacademicstudiesinenvironmentaleconomics. Prerequisites: Grade of C- or better in MATH 105, 134, or 221 and either ECON 101 or 102.
ECON 345 Intermediate Microeconomics (3) Microeconomics providesthefoundationforlogicalanddisciplinedreasoninginvirtually every aspect of economics. A rigorous introduction to the behavior of buyers and producers and their interaction in the market, course covers theories of rational choice, principles of production, and the economic costs of production. Attention devoted to the nature of competitive and monopoly markets and to markets for factors of production.Ineacharea,emphasizestheprinciples ofeconomicefficiency and the concept ofeconomic welfare. Prerequisites:Grade of C- or better in ECON 102 and MATH 134 or 221. Offered alternate years.
ECON 346 Intermediate Macroeconomics (3) Macroeconomics is the study of the economy as a whole. Course analyzes the factors determining the growth in income, changes in prices, and the rate of unemployment.Asappropriate,thecoursemakesuseofmodelssuited tothelongrunandtheshortrunandmodels ofbothopenandclosed economies. Prerequisites: Grade of C- or better in ECON 101, 102, and MATH 134 or 221. Offered alternate years.
ECON 372 Money and Banking (3) Monetary economics examines the effect of money on economic outcomes. The course focuses on the theory and applications of monetary economics with emphasis on how money supply and interest rates are controlled in practice. Discussiontopics includetheroleofinterestratesintheeconomyand their determination infinancial markets, operating goals and proceduresoftheFederal Reserveinitsimplementationofmonetarypolicy, and alternative theories regarding the determination of aggregate output,employment, and prices. Prerequisites: Grade of C-orbetter in ECON 101 and 102. Offered alternate years.
ECON 380 Special Topics in Economics (3) Covers topics not includedinothercourses,togivegreaterdepthincertainareas andto explorecurrenteconomictopics.Repeatablecourse.Contentchanges each time course is offered. Prerequisites: Grade of C - or better in ECON 101 and 102. Offered periodically.
ECON 395 Independent Study (1-3) Independent research in economicsconductedunderfacultysupervision. Prerequisite:Permission of instructor.
ECON 398 Internship in Economics (3) A structured assignment in which student gains practical experience in an economics position. Student is directed by the internship director and supervised by a memberofthecooperatingorganization. Enrollmentincoursemust be concurrent with the work experience. A contract (available from the business school's internship director) must be approved and an offerletter from the internship provider must be onfile before registeringforcourse.Sponsoringinstitutionsmayrequirestudentstohave completedspecificcourse(s) inadditiontothefollowing prerequisites prior to beginning the internship. Prerequisite: EXED 090, Grade of C- or better in ECON 101, ECON 102 and one from ECON 300,

345,346,372; permission of the internship director of the Schroeder Family School of Business Administration. Not repeatable.
ECON 400 Econometrics (3) Continuation of Economics 300. An introductory treatment of econometric techniques and their applicationtobusinessandsocial scienceresearch.Topics includegeneral linearregressionmodels, nonlinearregression,simultaneousequation models, and models with limited dependent variables. Based on a series ofexperimentsusing realworlddatasets.Prerequisite:Gradeof C- or better in ECON 300 . Offered periodically.
ECON 425 International Trade (3) Analyzes theories and empirical foundations of international trade and factor movement, trade barriers, internationalmonetaryrelations,foreignexchangesystems, balanceofpayments, andcurrentinternationaleconomicproblems. Prerequisites: Grade of C- or better in ECON 101 and 102. Offered alternate years.
ECON 435 International Monetary Economics (3) This course focuses on the theory of international monetary economics and appliesittowardsgaininganunderstandingofcurrentdevelopments and policy issues. The discussion topics on the theory side include the national income accounting, the foreign exchange markets and exchange rate determination, the effect of money and inflation on interestratesandexchangerates, theeffectofexchangeratesonaggregatedemandandoutput, thechoiceoftheexchangerateregime, and the effect of monetary and fiscal policy on employment and output inanopeneconomyunderflexibleandfixedexchangerateregimes. The insights gained from the theoretical discussion will help discuss various topics such as the US current account deficit, the impact of theChineseexchangeratepolicyonitstradepartners, theroleofmonetaryandfiscalpolicycoordinationintheaftermathoftheglobalfinancial crisis. Prerequisites: Grade of C- or better in ECON 101 and ECON 102.
ECON 470 Financial Institutions and Markets (3) The operation and management offinancial institutions and the markets in which they operatediscussed.Managerialand public policyissuestowardfinancial institutions and markets also addressed. Same as FIN 470. Prerequisite: Grade of C- or better in FIN 361. Offered alternate years.
ECON 497 Research Seminar (3) This course is the research portion of the economics major and students will draw on skills that they haveacquiredthroughouttheirmajorcoursework.Duringthecourse of the semester students will develop anoriginal contribution to the existingbodyofeconomicknowledge.Studentswilldeveloporiginal research questions within a chosen field of economics; choose the appropriate empirical approach, through the use of econometric tools, to address economic problems; and effectively communicate the results of empirical inquiry in both written papers and oral presentations. Prerequisites: Grade of C- or better in both ECON 101 or ECON 102 and ECON 300 or STAT 361.

## Education (EDUC)

EducationcoursesaretaughtbythefacultyoftheSchool ofEducation. EDUC 100 History and Foundations of American Education (3) History of schooling in America and how the current structures, philosophies,andpoliciescametobe.Covershowcontemporaryschools are structured, managed, funded, and staffed. Helps students identify and build the necessary skills (writing, communicating, using technology, knowing content, and building lifelong skills) to teach. Fall, spring.
EDUC 150 Foundations \& Diversity in American Educ (3) This course is a combination of lecture/seminar/small group practicum. Afteraboutsixweeks ofclassworkdirectedtowardthehistoricaland
foundational aspects of American education, students are placed in local schools that are classified as highly diverse with respect to both ethnicityandeconomiccircumstances(highlevelsoffreeandreduced lunch).Thecoursewillremainclassifiedasawriting-intensivecourse, andall ofthecurrentwritingassignmentswillberetained;thesewriting assignments are related to both the foundational and historical components of schooling as well as the various multicultural components that will help students become more culturally competent.
EDUC 200 Introduction to Diversity in Schools, Teachers, and Learners (3) Examines the complex realities of schools, teachers and learners in contemporary American society. Issues include cultural competency, models of effective teaching, diversity in learning, professionalstandards, andaccountability.Includessignificanttime spent in local school placements. Prerequisite or corequisite: EDUC 100. Fall, spring.

EDUC 201 Introduction to Special Education (3) An overview of exceptionality and special education, including definitions, basic legal requirements, and the history and development of the field. Alsoexaminesetiology,characteristics, andeducationalinterventions as they relate to following categories of special education: behavior disorders, communication disorders, health impairments, learning disabilities, intellectual disabilities, orthopedic disorders, and visual impairments.Finally, addressescurrentissues suchasinclusion, early childhood programming, transition, assessment, andmulticulturalism.
EDUC 204 Teaching Students W/ Mild/High Disability (3) Examines perspectives on mental retardation history, definition, assessment, causes, and prevention. Also focuses on characteristics of individualswhohavedifferentlevels ofretardationandtopics related to educational services, family concerns, individual and legal rights, institutional and community learning, and current issues.
EDUC 205 Clinical Intern I - Mild Intervention Elementary Level (3) Emphasizes practical application of the content in Education 204 or 206. All clinical experiences involve assignments of approximatelythreehoursaday,fourdays a week,for 14weeks.Students are assignedtoaspecialeducationclass,resourceroom,itinerantteacher or community agency serving children with disabilities. Activities in the clinical placement are designed to enhance the instruction presented in the corequisite courses. Corequisite: EDUC 204.
EDUC 210 Introduction to Special Education and Mild Disabilities (3) Introductiontoeducational servicesforchildrenwhoareincluded in the exceptional children categories of mild intellectual disability and learning disability. A brief overview of educational services for students in low incidence categories of physical and health impairment, visual impairment, hearing impairment and communication disorders, intellectual disability, and severe emotional disorders. Other areas covered are etiological, psychological, and sociological factors related to each disability category. Emphasis on elements of coordinatedprogrammingbetweenspecialandregulareducationpersonnelthatarerequiredtoeffectivelyeducatespecial needslearners.
EDUC 224 Introduction to Kindergarten Education (3) Introduces historical roots and current practices involving a holistic approach to educating a diverse population of young children. Areas of initial explorationincludephilosophy,scheduling, developmentallyappropriate materials, and transitions to kindergarten from preschool environmentconceptof"readiness"forschoolsituations.Laboratory experiences provided. Prerequisites: EDUC 100, 200. Fall.

EDUC 230 Experiences in the Arts for Young Children (3) Acquaints studentwithactivities, materials, equipment,andmethodsappropriate in music, creative play, and arts programming foryoung children.
EDUC 233 Child Development (3) Studies general behavior theory
and child development techniques for helping the child deal with problemsinthehomeandschool, preventingandeliminating deviant andundesirablebehaviors,anddeveloping parentalcooperationand educational programs.Identification, observation, andrecording of maturationsequencesemphasized.Laboratoryexperiencesincluded. Prerequisite: PSYC 226 or permission of instructor.
EDUC 235 Mathematics for Primary School Children (2) Emphasizes the value of science and mathematics experiences for young children.Proceduresandmaterialsusedtodevelopmathematicaland scientific concepts through the inquiry method are studied.
EDUC 236 Classroom Techniques for Teacher of Preschool Children (3) Discussions cover motivational techniques, classroom activities, use of methods and materials, and construction of lesson plans to meet individual needs of young children. Emphasizes relationships between techniques and goals of early childhood education.
EDUC 264 Assessment, Evaluation, and Remediation of Students with Special Needs (3) Students learn the nature of educational assessmentbystudyingtheprinciplesand practices ofdiagnosticprocedures in special education. Examines formal and informal assessments,standardizedtests,testadministration,testinterpretation, and summary writing in the primary academic areas of reading, mathematics,andwrittenexpression.Learntoutilizeassessmentasameans forformulatingeducationalgoalsandinstructionalobjectivesalong with measuring a student's progress. An instructional remediation practicuminreading,mathematics,andwrittenexpressionassigned.
EDUC 265 Role and Application of Computers in Education (3) Introductiontotherolesofcomputersineducationwithanemphasis oncomputer-assistedinstructionandcomputer-managedinstruction. Students learntousesoftware tools and writesimple programs. Two hours lecture, two hours lab.
EDUC 306 Teaching Students with Emotional \& Behavioral Disorders (3) Covers issues of definition, incidence, and prevalence in a historicalcontext.Classificationsystemsareidentifiedalong withthe majorconceptualmodels(e.g.,biological/biogenic,behavioral,cognitive/behavioral,ecological/sociological, psychodynamic/humanistic, and psycho-educational). Finally, educational planning techniques andstrategiesoutlinedforimprovingbehaviorsandteachingsocialization.

EDUC 307 Clinical Intern III/Intervention ED/BD For Students With EH/BD (3) Emphasizes practical application of the content in Education 306. Corequisite: Education 306. Note: All clinical experiences involve assignments for three hours a day, four days a week,for 14 weeks.Studentsareassignedtoaspecialeducationclass, resource room, itinerantteacher,orcommunityagencyservingchildrenwith disabilities.Activities intheclinical placementaredesigned to enhance the instruction presented in the corequisite courses.
EDUC 308 Teaching Students with Severe and/or Multiple Disabilities(3)Introduces prevalence,etiology, anddefinitionsofsevereand/ ormultipledisabilities.Studentslearntodesigneducation programs anddevelopcommunityserviceprogramstosupplementfamilysupport.Additionalissuesincludeassistivetechnology,functionalskills, and vocational skills. Finally, the idea of inclusion and the transition ofstudentswith severedisabilitiesfromschool to communitylifeare discussed.
EDUC 309 Clinical Intern IV - Intense Intervention (3) Emphasizes practical application of the content in Education 308. All clinical experiences involve assignments for three hours a day, four days a week,for 14 weeks.Studentsareassignedtoaspecial educationclass, resource room, itinerantteacher,orcommunity agencyservingchildrenwithdisabilities.Activitiesintheclinical placementaredesigned to enhance the instruction presented in the co-requisite course.

## Co-requisite: EDUC 308.

EDUC 320 Teaching Strategies in K-12 Schools (3) For prospective kindergarten-12 teachers. Addresses curricular and teaching issues from both the theoretical and practical perspectives. Emphasis on understanding the K-12 curriculum and preparing developmentally appropriate instructional strategies. Prerequisites: EDUC 100 and 200 or EDUC-150; or permission of instructor. Fall, spring.
EDUC 321 Teaching Social Studies (3) Examines methods of teaching the social sciences using current materials and basic concepts. Unit planning and inquiry methods of teaching, including the knowledgeanduseoflearningresources,emphasized.Prerequisite: EDUC 320. Corequisites: EDUC 323, 324, 419; or permission of instructor. Spring.
EDUC 322 Strategies for Special Needs Students In K-12 Schools (3) Designedfork-12teachers,includesdevelopmentofskills,strategies, andknowledgeneededtomeettheeducationalneedsofstudentswith specialneeds. Special needs students, including thosewith learning disabilities, cultural or language differences, or other conditions that inhibit learning, have a right to access the regular education curriculum and are often included in regularclassrooms. This course includes a practicum in local schools. Prerequisites: EDUC 100 and 200 or EDUC-150. EDUC-320. Or permission of instructor. Fall, spring.
EDUC 323 Teaching Science, Conservation, and Ecology (3) The discovery approach to teaching science emphasized. Prerequisites: Two general science courses; EDUC 320. Corequisites: EDUC 321, 324, 419; or permission of instructor. Spring.
EDUC 324 Principles and Practices in Mathematics Education (3) Provides experiences in methods, materials, and organization of elementary and middle school mathematics education. Emphasis onactivity-basedlearningandmeetingindividual needsofstudents includingmainstreamedstudents. Twohourslecture,twohourslab. Prerequisites: EDUC 320; MATH 101, 202. Corequisites: EDUC 321, 323, 419; or permission of instructor.
EDUC 327 Integrated and Innovative Approaches in ENL (3) Continuation of ENL techniques and methods covered in EDUC 326. Provides students more in-depth knowledge and additional applications ofENLfoundations, techniques, and learning variables. StudentsstudythelatestENLapproachesandthenworkontheapplication ofthese principlesastheypertaintoclassroommanagement, learningstyles,andclassroominteraction/dynamicsParticipantsalso examine the acquisition of both first and second languages so they cancompareandcontrastthetwo processesforabetterassessmentof errors and approaches for learning.

EDUC 330 Literature for the Elementary and Adolescent Child (3) Literature, stories, essays, issues, and language materials for kindergarten through young adult reviewed. Prerequisite: EDUC-320. Spring.
EDUC 331 Communicating Values of Literature (2) Studies values of literature for middle school (grades five to nine) and junior and seniorhighschoolstudents, anddevelopstechniquesforhelpingthe character. Teachers and community leaders are trained tolead small andlargegroupdiscussions.Materialsareselectedtofurthertheinterests, tastes, and values of all available literature. Prerequisites: One general education literature course; EDUC 100, 200; or permission of instructor.
EDUC 345 Designing Developmentally Appropriate Curriculum for KindergartenEducation(3)Modelsofkindergarteneducationbased onvariouschildgrowthanddevelopmentphilosophiesofhowyoung children grow and develop are utilized as the basis for designing age-appropriateeffectiveinstructionformeaningfulschoolprograms
for young children. Topics include developmentally appropriate curriculumplanning, classroommanagement(rules, procedures, discipline), environmental design, organization, and administration of model programs.Laboratoryexperiencesareprovided.Prerequisite/ Corequisite: EDUC-320. Fall.
EDUC 362 All-Grade Curriculum and Teaching Strategies (3) For prospective teachers in all-grade art, music, and physical education programs. Addresses curriculum and teaching issues at elementary, middleschool, andseniorhighschoollevels. Practicumexperiences included. Should be taken in the same semester that the teaching major special methods course is taken. Prerequisites: EDUC 100, 200; or permission of instructor.
EDUC 363 Principles and Strategies of Teaching in Secondary Schools (3) The application of learning principles, analysis of forces influencing the educational process, and the general methods and proceduresusedinteachinginsecondaryschoolsarestudied.Intern teaching experiences required in addition to class time. Additional internship hours required. Junior-level course. Prerequisites: EDUC 150, 320; admission to teacher education. Corequisite: Appropriate methods course selected from EDUC 451, 453, 454, 456, 459, 461, ART 497, MUS 476, 372, 373 . Fall, spring.
EDUC 385 Multicultural Understanding (3) Introduction to diverse lifestyles related to a variety of cultural groups. The worth of each individual emphasized, and the importance ofthis viewfordevelopingtheunderstandingrequiredforinterculturalrelationshipsstressed.
EDUC 401 Dev Educ Prog Indiv With Disabilities (3) This course evaluates various types of educational programs (IFSP, IEP, and ISP) developedacrossthelifespan(birthtoadulthood) ofindividualswith disabilities.Effectivestrategiesforcollaborationbetweeneducational professionals and related service providers are examined.
EDUC 403 Classroom Management Techniques for the Elementary Teacher (1) Introduces basic classroom management techniques designed to promote teaching with individuals and groups. Areas of emphasis include avoiding behavior problems, solving behavior problems, and fostering personal growth. Utilizes research-based approach. Prerequisites: EDUC 100, 200. Fall.
EDUC 409 Internship in Kindergarten Education (4) Opportunities to integratebasicskills andknowledgeinapplied practicesituations. Observations, assessment, lesson presentation, and curriculumplanning in primary setting stressed. Laboratory experiences provided. Prerequisites: EDUC 224, 345. Fall.
EDUC 410 Program Preschool Children W/Disabilities (3) Explores avariety ofmethods, materials, andtheories regarding theidentification and integration of children with disabilities 0-5 years of age into preschool programs.Emphasizesidentification,assessment, intervention, teachingtechniques, child development, programadministration, curriculum revision, physical facilities and adaptations, referral processes, and resources. Prerequisite: PSYC 226 or permission of instructor.
EDUC 411 Creative Learning and Play Experiences for Young Children(3)Stressesthe roles of creativelearning and playexperiences in the child's intellectual, social, and emotional development. Studies the developmentalandtherapeutic aspects of play and appropriate methods and materials for structuring play.
EDUC 412 Home School Relationships/Preschool (3) Ways to build effectivehome-schoolrelationshipsandprovideparenteffectiveness training emphasized; teaching parents how to teach their children stressed.
EDUC 416 Kindergarten Education (2) An overview of kindergarten programming. Topics include the social climate of the classroom, ways to provide for the child's well-being, available equipment and
supplies, curricular and daily schedule plans, preparing records and reports,foundations oflearningandreadinessforfirstgrade, andkindergartenorganizationandadministration.Laboratoryexperiences included. Prerequisites: EDUC 100, 200. Offered alternate spring semesters.
EDUC 418 Intern Implementing the Lang Arts Curr Arts Curriculum (4) Integrates communicative skills with classroom experiences. Givesstudentsopportunitytoapplyskillsandmethodologylearned in language arts, reading, and children's literature courses in actual classroomsituationsinindividualized,smallgroup, andwholegroup teaching situations. Supervision by the classroom teacher and the collegeinstructorblendstheory,research,methodology,andpractical experienceinteachingthelanguageartsintheclassroom.Additional internship hours required. Prerequisites: Junior status; EDUC 100, 200, 320. Corequisites: Admission to teacher education; EDUC 403, 421, 422; or permission of instructor. Fall.
EDUC 419 Internship Implementing Soc Stud/Sci Cur And Science Curriculum (4) Coordinates the teaching of mathematics, science, and social studies in the elementary school. Students placed sothey canapplytheappropriatemethodologyforeachofthesesubjectareas. Provides practicumexperiencesthatallowtheDevelopingteacherto apply newly developed skills. Additional internship hours required. Prerequisite: Junior status; EDUC 100, 200, 320. Corequisites: Admission to teacher education; EDUC 321, 323, 324; or permission of instructor. Spring.
EDUC 420 Teaching Language Arts in the Elementary Schools (3) Theprocesses, procedures, and problemsencounteredinteachingthe language arts discussed. Consideration for developing and refining the Pupil's proficiency in the oral and written language domains included. Spelling, usage, handwriting, and linguistics for the classroom teacher also studied. Prerequisite: EDUC 320. Corequisites: EDUC 330, 418, 426; or permission of instructor.
EDUC 421 Preschool and Beginning Reading Skills (3) Explores developmentalaspects of reading acquisition as they relate particularlytotheearly stages oflearning to read. Provides backgroundand techniquestopromotereadingacquisition.Evaluation, diagnosis, and remediation of those early skills stressed. Students learn to involve parentsinthedevelopmentofpre-readingskills.Prerequisites:EDUC 100 and 200. Fall.
EDUC 422 Teaching Reading and Language Arts in the Elementary School (4) Explores process, procedures, and problems in teaching readingandlanguagearts.Reading contentincludesbasicknowledge and competency required for planning and implementing developmental reading programs. Language arts content includes basic knowledge and skills for instruction designed to develop and refine students' proficiency in oral and written language. Prerequisites: EDUC 100, 200; or permission of instructor.
EDUC 426 Teaching Reading (3) Theory and methodology of teachingreadingemphasized.Stressesbasicknowledgeandcompetency required for planning and implementing developmental reading programs intheelementaryschool.Basicinstrumentalemphasis on developingthediagnostic-prescriptiveinstructionaldesign.Prerequisite: EDUC 320. Corequisites: EDUC 330, 418, 420; or permission of instructor. Fall.
EDUC 427 Corrective Reading (3) Diagnosis and treatment of reading difficulties for the classroom teacher are discussed. Emphasizes diagnosticstrategiesandtreatmentproceduresforcommonkinds of reading problems.Clinicalexperiencesintegraltothiscourse.Prerequisite: EDUC 422. Spring.
EDUC 428 Reading in the Content Areas (3) Provides Overview of basicreadingskillsandspecificcomprehensionandvocabularyskills for the contentareas. Studytechniques, reading levels, and compre-
hension development are examined, and skills in teaching content area lessons developed. Field placement included. Prerequisites: EDUC 426, 427, 436, 443; or permission of instructor. Fall, spring.
EDUC 430 Supervised Teaching in Kindergarten Education (6) Studentsreceivingkindergartenendorsementsmustcompleteteaching and other observational and Participatory activities under the supervision of a cooperating kindergarten teacher and a University supervisor.Agrade of Corbettermustbeearnedinstudentteaching toberecommendedforateachinglicense.Prerequisites:Admittedto teacher education; grade C or better in all education courses; EDUC $224,345,411$ with GPA of at least 2.75 in these courses; senior status with at least 2.70 overall GPA. Spring.
EDUC 432 Supervised Teaching in Elementary School (6) Teaching, observation, and participation activities under the supervision of a cooperating teacher and a University supervisor. A grade of C or bettermustbeearnedinstudentteaching to berecommendedfora teachinglicense.Prerequisites:Admittedtoteachereducation;grade of $C$ or better in all education courses; ART 102, EDUC 320, 321, 323, 324, 418, 419, 420, 426, MUS 270, with GPA of at least 2.75 in these courses; senior status with at least a 2.70 overall GPA. Fall, spring.
EDUC 434 Supervised Teaching in Middle School (6) Teaching and otherobservationand participationactivitiesunderthe supervision of a cooperating teacher and a University supervisor. A grade of C or bettermustbeearnedinstudentteachingtoberecommendedfora teachinglicense.Prerequisites:Admittedtoteachereducation; grade of $C$ or better in all education courses; EDUC 426, 427, 443, with at least a 2.75 GPA in those courses; at least 15 hours of course work in the teaching subject with at leasta 2.80 GPA in those courses; senior status with at least a 2.70 overall GPA. Fall, spring.
EDUC 435 Supervised Teaching Seminar (1) Emphasis is on the discussionofprofessionalexpectationsandstudentteachingexperiences. Topics of importance and interest to teachers will be presented by authorities in those areas. Corequisite: Supervised teaching - EDUC $432,433,434,436,437,439,497$, MUS 478 or 479.
EDUC 436 Supervised Teaching in Senior High or Middle School (6)Teaching andotherobservationand participationactivities under thesupervision ofacooperatingteacherandaUniversitysupervisor. A grade of C or better must be earned in student teaching to be recommendedforateachinglicense.Prerequisites:Admittedtoteacher education; grade of C or Better in all education courses; EDUC 363, 428 , and special methods course (may be taken concurrently) with GPA of at least 2.75 in those courses; at least 30 hours of course work in the major teaching subject with a GPA of at least 2.80 in those courses; atleast 18 hours of courseworkintheminorteachingsubject with a GPA of at least 2.50 in those courses; senior status with at least a 2.70 overall GPA. Corequisites: EDUC 428, 443 . Fall, spring.
EDUC 437ED Supv Tchg in Special Classes (for Disab) (6) Teaching and other activities under the supervision of a cooperating teacher anda University supervisor in special education. Prerequisites:Passing grade in EDUC-400, Admission to Student Teaching. Students register for EDUC 437 MD, SD, EH according to the educational setting desired. Students in the Clinical Training Program in special education enroll in EDUC 437 and in EDUC 439. Fall, spring.
EDUC 437MD Supervised Teaching in Special Classes - Mild Disabilities (6) Teaching and other activities under the supervision of a cooperatingteacherandaUniversitysupervisorinspecialeducation. Prerequisites:Admitted to teacher education; grade of C orbetter in all required courses; EDUC $210,324,420,426,427$, with GPA of at least 2.75 in those courses; senior status with overall GPA of at least 2.70. Students register for EDUC 437 MD, SD, ED according to the
certification area desired. Students in the Clinical Training Program in special education enroll in EDUC 437 and/or in EDUC 439 in a second exceptionality area. Fall, spring.
EDUC 437SD Supv Tchg in Special Classes (for Disab) for Severe Disabilities (6)Teaching and otheractivities underthe supervision of acooperatingteacherandaUniversitysupervisorinspecialeducation. Prerequisites: Passing grade in EDUC-400, Admission to Student Teaching. Students register for EDUC 437 MD, SD, EH according to the educational setting desired. Students in the Clinical Training Program in special education enroll in EDUC 437 and in EDUC 439. Fall, spring.
EDUC 439ED Supv Tchg in Special Classes (for Disab) for Emotionally Handicapped (6) Teaching and other activities under the supervision of cooperating teacheranda University supervisor in special education. Prerequisites: Passing grade in EDUC-400, Admission to Student Teaching. Students register for EDUC 437 MD, SD, EH according totheeducational setting desired. Students intheClinical Training Program in special education enroll in EDUC 437 and in EDUC 439. Fall, spring.
EDUC 439MD Supv Tchg in Special Classes (for Disab) for Mild Disabilities (6)Teaching and otheractivities underthe supervision of acooperatingteacherandaUniversitysupervisorinspecialeducation. Prerequisites: Passing grade in EDUC-400, Admission to Student Teaching. Students register for EDUC 437 MD, SD, EH according to the educational setting desired. Students in the Clinical Training Program in special education enroll in EDUC 437 and in EDUC 439. Fall, spring.
EDUC 439SD Supv Tchg in Special Classes (for Disab) for Severe Disabilities (6) Teaching and otheractivities underthe supervision of acooperatingteacherandaUniversitysupervisorinspecialeducation. Prerequisites: Passing grade in EDUC-400, Admission to Student Teaching. Students register for EDUC 437 MD, SD, EH according to the educational setting desired. Students in the Clinical Training Program in special education enroll in EDUC 437 and in EDUC 439. Fall, spring.
EDUC 443 Curriculum and Learning in Junior High/Middle School (3) Designed for prospective teachers in junior high and middle schools.Addressescurricularissuesandlearningissuesfromthetheoretical and practical vantage pointsfor the middle school. A strong focus on developing an understanding of the curriculum in junior high and middle schools, how it is designed and taught, and the policiesthathaveanimpactonitscontinueddevelopment.Examines learning theories in relationships to student needs in junior high andmiddleschools.Field placementincluded.Additionalinternship required. Prerequisites: EDUC 320; admission to teacher education.
EDUC 447 Intellectual Disab \& Assorted Severe Disabilities (3) Examines the psychological, sociological, and educational implications of intellectual disabilities and its causes, characteristics, diagnosis, and treatment. Special problems of individuals with low functioning, multiple disabilities are analyzed. Prerequisite: EDUC 201 or PSYC 121 or permission of instructor. Fall.
EDUC 451 Methods of Teaching Science in Senior High, Junior High, Middle Schools (2) This course is a one-semester introduction tomethodsandissuessurroundingtheteachingofscienceinmiddle, junior, and senior high levels. The course is specifically designed to connect the student's training in science to educational theories. The course will focus on issues surrounding science instruction and teachingtechniques. Prerequisite: Admission to teacher education. Corequisite: EDUC 363.
EDUC 453 Methods of Teaching English in Senior High, Junior High, Middle Schools (2) This course is a one-semester introduction
tomethodsandissuessurroundingtheteaching of EnglishLanguage Arts in middle, junior, and senior high levels. The course is specificallydesignedtoconnectthestudent'straining inEnglish Language Artstoeducationaltheories. Thecoursewillfocusonissuessurround-ingEnglishLanguageArtsinstructionandteachingtechniques.Prerequisite: Admission to teacher education. Corequisite: EDUC 363.
EDUC 454 Methods of Teaching Foreign Language In Senior High, Junior High, Middle Schools (2) This course is a one-semester introduction to methods and issues surrounding the teaching of foreign language in middle, junior, and senior high levels. The course is specificallydesignedtoconnectthestudentstraininginforeignlanguage to educational theories. The course will focus on issues surrounding foreignlanguageinstructionandteachingtechniques.Prerequisite: Admission to teacher education. Corequisite: EDUC 363.
EDUC 456 Methods of Teaching Mathematics in Senior High, Junior High, Middle Schools (2) This course is a one-semester introduction to methods and issues surrounding the teaching of mathematics in middle, junior, and senior high levels. The course is specificallydesignedtoconnectthestudentstraininginmathematics to educational theories. The course will focus on issues surrounding mathematics instruction and teachingtechniques. Prerequisite: Admission to teacher education. Corequisite: EDUC 363.
EDUC 457 Methods of Teaching Physical Education In Elementary, Senior High, Junior High Middle Schools (2) Prerequisite: Admission to teacher education. Corequisite: Education 363.
EDUC 459 Methods of Teaching Theatre Arts in Senior High, Junior High, Middle Schools (2) This course is a one-semester introduction to methods and issues surrounding the teaching of theatre arts in middle, junior, and senior high levels. The course is specifically designed to connect the students training in theatre arts to educational theories. The course will focus on issues surrounding theatre artsinstructionandteachingtechniques.Prerequisite:Admissionto teacher education. Corequisite: Education 363.
EDUC 460 Methods of Teaching Speech in Senior High, Junior High, Middle Schools (2) Prerequisite: Admission to teacher education. Corequisite: Education 363.
EDUC 461 Methods of Teaching Social Sciences in Senior High, Junior High, Middle Schools (2) This course is a one-semester introduction to methods and issues surrounding the teaching of Social Studies in middle, junior, and senior high levels. The course is specifically designed to connect the students training in social studies to educational theories. The course will focus on issues surrounding Social Studies instruction and teaching techniques. Prerequisite: Admission to teacher education. Corequisite: EDUC 363.
EDUC 463 Inclusion and Collaborative Teaching (3) Studies the integration of special education in the regular classroom. Service delivery models for students with special needs are identified and analyzed.Emphasisoncollaborativeprocedures,specialservices,and instructionaladaptationthatregularandspecialeducationteachers use to meet the learning needs of special needs students enrolled in general education classes.
EDUC 465 Advanced Application of Computers in Education (3) Teachers, counselors, and administrators introduced to the roles of computers in education in the areas of administration, comput-er-assistedinstruction,computer-managedinstruction, and comput-er-assisted guidance programs. Computer-assisted instruction and computer-managed instruction emphasized. Prerequisites: EDUC 100, 200, 265.
EDUC 472 Adolescent Development and Learning Patterns (3) A detailedstudy ofthephysical, intellectual, social, andemotionalchar-
acteristics of early adolescence (from about 14 to 18 years). Instructional implications of developmental patterns investigated. Topics include the developmental characteristics of youth as they relate to and determine curriculum goals, relevance of content, instructional organization,independenceandleadershipdevelopmentgoals,career educationgoals, and otherspecial needs oftheearlyadolescentand middle student. Prerequisite: PSYC 226 or permission of instructor. Alternate years. Fall.
EDUC 475 Supervision and Organization of Clinical Experiences in Literacy (4) Experiences to engage in supervision and organization of diagnosis and remediation of literacy difficulties in a classroom setting. Under supervision of a University instructor. Prerequisites: EDUC 422, 427, or permission of instructor. Fall, spring.
EDUC480 Orientation to Deafness (1) General overview of deafness. Many aspects of the deaf community and skills necessary for individualswhoplantoworkorassociatewith deafpersonsemphasized. Anatomicandmedicalaspectsofdeafness,audiology,communication with the deaf,telecommunicationdevices,educationalissues, vocational rehabilitation, sociological factors, psychologicalfactors, and legal aspects of deafness.
EDUC 481 Basic Sign Language (3) Familiarity with the basic structures of sign language. Emphasizes acquisition of a core vocabulary of signs and finger spelling in American Sign Language or signed English.Developsskillsandtechniquesofnonverbalcommunication necessary to communicate effectively with deaf persons.
EDUC 482 Intermediate Sign Language (3) Expands sign vocabulary and ability to utilize the manual alphabet. The use of conceptually appropriatesignsinconversationemphasized;receptiveskillsdeveloped further. Prerequisite: EDUC 481 or permission of instructor. Spring.
EDUC 483 Advanced Sign Language (3) Opportunities to communicate solely in sign language in a variety of activities and situations. Prerequisites: EDUC 481, 482; or permission of instructor.

EDUC 487 Education of Gifted and Talented Children (3) Examines definitions of the term "gifted," delineates characteristics unique to thegiftedandtalented, andreviews proceduresusedtoidentifythese children. The nature of creativity and the direction of programs for youth ofdiverseabilitiesconsidered.Relatedresearch reviewed.Prerequisite:Juniorlevelinteachereducationorpermission ofinstructor.
EDUC 488 Curriculum and Methodology in Gifted/Talented Education (3) Reviews curricular programs forgifted and talented children and youth. Introduces methods for developing creativity and prob-lem-solvingskills.Examinesproceduresforcontentaugmentationare consideredand programmodels.Prerequisite:Juniorlevelinteacher education or permission of Instructor.
EDUC 490 Schools in a Changing Society (3) Capstone course in education.Focusesonthemanywayseducationandothersocialinstitutionsareinfluencedbysocietalandculturalchanges.Historicaland currentsocial issues affectingeducationareanalyzedandevaluated from historical, economic, political, multicultural, legal, moral, and ethical perspectives.Limitedtoseniorswhohavebeenfullyadmitted toteachereducationandwhomeetallstudentteachingrequirements or who have permission of instructor. Fall, spring.
EDUC 497 Supervised Teaching and Observation in Elementary, Middle School, Junior High, and Senior High (1-12) Teaching, observation, and participation activities under the supervision of a classroomteacherorcommunityagencystaffmemberandaUniversity supervisor. Fall, spring.
EDUC 498 Seminar: Field Experience in English Schools (1) Study of the British education system. May include both classroom and
field-basedexperiencestopromoteunderstandingofcontrastsand comparisons of the American and British system.
EDUC 499 Seminar: Basic Issues in Education (1-3) Seminar, workshops,orindependentresearch projectsonissuesandproblems in moderneducation. Prerequisite:Instructor's approval. Forgradu-ate-level courses, please refer to the graduate course descriptions in this catalog.
EDUC H498 Seminar: Field Experience in English Schools (1) Study of the British education system. May include both classroom and field-basedexperiencestopromoteunderstandingofcontrastsand comparisons of the American and British system.

## Electrical Engineering (EE)

Electricalengineeringcoursesaretaughtbythefaculty oftheDepartmentofElectricalEngineering andComputerScience.Pre-engineeringstudentsandstudentsnotadmittedtotheCollegeofEngineering and Computer Science may not enroll in any electrical engineering (EE) course numbered 200 or above without specific permission of the instructor, chair, or dean.
EE 210 Circuits (3) Integrated lab/lecture covers the fundamentals of electrical circuit analysis. Introduces foundational circuit theorems and analysis methods. These include: Ohm's law, Kirchhoff 's laws, circuit reduction, node voltage analysis, mesh current analysis,superposition, and Thevenin and Norton equivalent circuits. Thecurrent-voltagecharacteristicsforresistors,capacitors,inductors, diodes, and transistors are discussed. Additional topics includeanalysis of resistive DC circuits, operational amplifiers, the natural and step responses of first and second-order RLC circuits, the steadystate sinusoidal response of RLC circuits, and common diode and transistorapplications. Theoretical principles verified bycircuitconstructionandmeasurementandthroughtheuseofcircuitsimulation software. Students learn to use a variety of electrical test equipment including voltmeters, ammeters, ohmmeters, and digital andanalog oscilloscopes. Prerequisite: MATH 222. Fall, spring.
EE 215 Circuits and Systems (3) An integrated lab/lecture covers linear system theory as applied in the analysis of electrical circuits. Topics include the sinusoidal steadystate response and phasors, the Laplace transform, Fourier series and the Fourier transform, passive and active frequency selective circuits (filters), and Bode diagrams. Theoretical principles verified by circuit construction and measurement and through the use of circuit simulation software. Prerequisites: EE 210. Corequisite: MATH 324 or permission of instructor. Spring, summer.
EE 224 Electrical Engineering Programming Lab (2) Provides advanced programming conceptsforelectricalengineeringmajors. Thecourseisspecificallyaimedatprogrammingmicrocontrollersand theuseofprogrammingtoolsinelectricalengineering.Topicscovered includebitmanipulation, memoryallocation concepts, architectural considerations, realtimeevents,specializedmicrocontrollerl/O, and programming with MATLAB and other simulation tools. Prerequisites: EE 210 and either ENGR 123 or CS 210. Spring.
EE 254 Logic Design (3) Presents a thorough treatment of combinational and sequential logic design. Topics include number systems, Booleanalgebra,minimization procedures, sequentialcircuitdesign, flipflops, counters, registers, andfinite-statemachines.Logicdesign is applied to computer architecture and microprogramming and hard-wiredconceptsareintroduced.Programmablelogicdevicesand computeraideddesigntoolsfordigital circuitsusedforclassprojects. Spring.
EE 310 Linear Systems and DSP I (3) Provides a unified treatment of continuous-timeanddiscrete-timelinearsignalsandsystems.Topics include introduction to the mathematical representation of signals,
systemcharacterization, convolution, and systemanalysisinthetime andfrequencydomainsusingdifferentialequations,statevectorequationsandtransformtechniques.Fourier,Laplace, Z, anddiscrete-Fourier transform techniques of signal and system analysis presented. Prerequisites: EE 215; MATH 324. Fall.
EE 311 Linear Systems and DSP II (3) Provides an application of discrete system analysis and design techniques to digital signal processing (DSP). Reviews difference equations, the Z transform and the discrete Fourier transform. Topics include analysis and design of recursive and non-recursivefilter structures, analog filter approximations, the realization problem, the Fast Fourier Transform, and two-dimensional filtering. Projects include MatLab simulations and implementations on real-time DSP systems using C. Prerequisite: EE 310. Spring.

EE320Engineering Electromagnetics(3)Introductiontoelectromagnetic field theory. Topics include Maxwell's equations, divergence, Poisson's and Laplace's equations, conductance and capacitance, Stokes's theorem,retarded potentials, Poynting theorem, and skin effect. Prerequisites: EE 215, MATH 323 and PHYS 211. Recommended: MATH 324. Fall.

EE 330 Introduction to Power Systems (3) Introduces the principles and concepts that are the basis of electric power systems. Topics include single phase and three phase systems, the per-unit system, synchronous generators,single phaseand three phase powertransformers modeling and design, transmission line models for steady stateoperation, transmissionsystemdesign,lineload-abilityandstabilitylimits, powerflowanalysis,faulttolerance,andoptimaldispatch of generation. Prerequisite: EE 215.
EE 342 Electronics I (3) Lecture/project covers analysis and design of diode and transistor circuits. Diode, metal-oxide-semiconductor field-effect transistor (MOSFET) and bipolar junction transistor (BJT) device characteristics are explored in detail. Major topics include diode applications, transistor amplifiers, and digital logic families. Specific topics include amplifier characteristics, circuit modelsforamplifiers, the pnjunction, ideal diodes, modeling diode forward characteristics, reverse breakdown of diodes, MOSFET and BJT device structures, MOSFET and BJT amplifiers in DC, MOS small-signaloperationanddiscrete-circuitamplifiers,complementary metal-oxide-semiconductor (CMOS) inverters, CMOS logic-gate circuits, pass-transistorlogic(PTL)circuits,andemitter-coupledlogic (ECL) circuits. Several small team projects are used to reinforce theory and to develop design skills. Prerequisites: EE 210. Corequisite: EE 254 or permission of the instructor. Fall.
EE 343 Electronics II (3) Lecture/project with continued coverage of material presented in Electrical Engineering 342. Major topics include BJT amplifiers, IC amplifiers, differential amplifiers, nonideal operational amplifiers, and frequency effects. Specific topics include small-signal operation and models of BJTs, discrete-circuit BJT amplifiers, IC amplifiers, current-mirrors with improved performance, BJT and MOS differential pair circuits, common-mode rejection ratio, DC imperfections of op amps, large signal operation of op amps, LM741 op amp circuit, high frequency BJT and MOS models, andthehighandlowfrequencyresponseoftransistoramplifiers. Several small team projects are used to reinforce theory and to develop design skills. Prerequisites: EE 215, 342.

EE 354 Digital Systems (3) Takes up the logical design of computer systemswithemphasisontheinteractionbetweenhardwareandsoftware.Topicsincluderegisterdesign,memorysystems, programmable I/O devices,interrupt driven I/O, controller design and microprogramming,bussystems,interfaceelectronics,andassemblylanguage programming. Computer aided design tools are used throughout course. Several different microcontrollers are used for projects to
illustrateconcepts.Assembly languageandCusedforclass projects. Prerequisites: EE 254; working knowledge of C or C++. Fall.
EE 356 Small Computer Software (3) Introduction to the graphical user interface provided by the WindowsT operating system using C\#.NET. Topics include the console applications, windows forms, elementary graphics,ASP.NET web forms, ADO.NET, TCP/IP connection between computers, and dynamic-link libraries(DLLs) and/ or device drivers. Prerequisites: ENGR 123 or CS 210; EE 254 or CS 220. Same as CS 376. Fall.

EE 360 Linear Control Systems (3) Introduction to analysis and design of linear analog and digital feedback control systems. Topics includesystemmodeling,timeandfrequencydomain performance analysis, stability analysis, and controller design. Introduces both root locus and frequency domain techniques of system analysis and design. Presents emulation techniques for digital controller design. Prerequisite: EE 310. Spring.
EE 380 Intermediate Electrical Projects Lab (2) Provides for the designandconstruction ofseveralopenended projectschosenfrom 300 levelelectricalengineering courses. Projectareasincludedigital andanalogelectronics,linearsystems,logicdesign, microcomputers, electromagnetics, electro-optics, and circuits. Prerequisites: EE310, 342 , and 354 . Spring.
EE 410 Analog Circuit Synthesis (3) Lecture/project covers analysis and design of active circuits. Major topics include feedback, instrumentation amplifiers, active filter design, non-linear circuits, signal generators, andvoltageregulationcircuits. Prerequisites:EE310,343.
EE 415 Digital Image Processing (3) A study of the computer methods used in processing digital images. Topics include: image acquisition, image enhancement and restoration, image representation, computerimagefileformats, andimage compression. Processing of bothmonochromeandcolorimagesisdiscussed. Representationand processing of images in the spatial (pixel) and frequency domains is covered. Prerequisite: EE 310
EE 421 Photonics I (3) Introduction to basic optics, optical devices and lasers. Topics include geometrical and physical optics, ray matrices, optical fiber characteristics, losses, dispersion, transverse electromagneticmodes, and communications. Examples of current applicationsandlaboratorydemonstrations provided. Prerequisite: EE 215 Corequisite: EE 320. Spring.
EE 422 Photonics II (3) Introduction to lasers and laser systems. Topicsincludestableoptical cavitydesign,atomicmediacharacteristics, gain equations, rate equations, cavity modes, cavity devices mode control, and pulse forming networks. Prerequisite: EE 421.

EE 425 Lines Waves and Antennas (3) Examines transmission lines, waveguides, and antennas. Topics include transmission line equations, Smith charts, slotted lines, microwave impedance matching, planewavepropagation, radiation patterns, andantennaarrays.Prerequisite: EE 320. Taught by request.

EE 430 Energy Conversion Systems (3) Introduces theory of operation and analysis of energy conversion devices and systems. Topics include magnetic and electric forces, electromechanical energy conversion, motors,energystorage,solarelectric, wind power,small hydro,fuelcells,biomass,andgeothermal.Includesa projectlab.Prerequisites: EE 210; MATH 222.
EE 432 Analysis of Power Systems (3) Covers operation, control, protection, and stability of power systems. Topics include power flow analysis, synchronous machine transient analysis, symmetrical components,balancedandunbalancedfaultanalysis, powersystem control, frequency control, automatic generation control, reactive powerandvoltagecontrol,stabilityanalysis,and protection ofpower
systems. Prerequisite: EE 330 or 430.
EE 437 Power System Planning (3) Covers topics in distribution systemplanning,loadcharacteristics, designofsubtransmissionlines, distributionsubstations, primaryandsecondarysystems,application of capacitors, voltageregulation, distributionsystem protection, and reliability. Prerequisite: EE 330.
EE 438 Electric Power Quality (3) Focuses on such subjects as harmonics, noise, filtering, and communication interference in power systems. Modeling, analysis, and solutions are points of emphasis. Topics include measures and standards of power quality, measurements and errors, modeling and design of components, harmonics, loads which cause powerquality problems, susceptibility ofloads to unwanted signals, and power quality improvement.
EE 440 Communication Electronics (3) Lecture/project focuses on circuits used in modern wireless communication devices. Topics includehighfrequencypassivecomponentmodels, transmissionline and microstrip theory and the Smith chart, multiport networks and scattering parameters, radiofrequencyfilterdesign, highfrequency activedevicesandmodels,matchingnetworks,radiofrequencyamplifiers, oscillators,and mixers. Prerequisites: EE 320, 470. Fall.
EE 445 Industrial Electronics and Controls (3) Introduces power electronic systems and design of power electronic devices used for commercial and industrial instrumentation and control. Topics include magnetic materials and design, semiconductor switches, power diodes, rectifiers, inverters, ac voltage controllers, level triggered switching devices, power MOSFETS, IGBT, pulsed triggered devices, thyristors, GTO, MCT, thyristor circuits, power transistors, dctodcconverters,switch-modepowersupplies, dctocontrolledac, UPS, ac to controlled ac, ac and dc motor drivers. Prerequisite: EE 342.

EE454Microcontroller Applications (3) Focuses on the use of micro-controllersinreal-timeapplications.Organizedaroundseveralopenendedprojects.Eachprojectrequiresthecompletedesignofaworking microcontroller system for a given application and programming in C. Prerequisite: EE 354. Spring.

EE 456 Small Computer System Design (3) Project-based course coversadvanceddesignanddevelopmenttopics relatedtoreal-time microcomputer systems and networks. Topics include memory management, datastructures, networkarchitecture,communication protocols, power considerations, hardware design, and hardware/ software trade-offs. Prerequisites: EE 354, 454. Taught by request.
EE 458 Embedded Systems and Real-Time Programming (3) Covers real-time programming techniques that are commonly used on embedded systems. Topics include real-time operating system concepts, concurrentprogrammingandtaskschedulingalgorithms, mutual exclusion and synchronization methods, and interprocess communication.Real-worldexperiencewriting applicationsfortwo popularembedded operating systems. Prerequisites:CS215;EE354 or CS 220; or permission of instructor. Same as CS 478. Spring.
EE 465 Digital Control Systems (3) Advanced analysis and design of linear systems. Analysis and design of digital control systems emphasizedthroughclassroomdiscussions,homeworkassignments anddesign projects.Bothclassicalandmoderncontrolsystemdesign techniques studied. Prerequisite: EE 360.
EE 470 Analog and Digital Communications Theory (3) Communicationtheoryforbothdigitalandanalogsystems.Emphasisondigital systems. TopicsincludeFourieranalysis, modulationanddemodulationtheory, digitalsignalingformats, communicationsystemsdesign fundamentals, and applications. Probability and random processes introducedandappliedtothestudy ofnarrowbandnoiseincommunication systems. Prerequisite: EE 310. Fall.

EE 471 Wireless Communication Theory (3) This is a senior level coursethatprovidesasystems-levelviewofmodernwirelesscommunicationsystems.Specialemphasis willbeplacedupondevelopment andunderstanding ofthecellulartelephonenetwork.Topicsinclude: wireless propagation, antenna radiation, channel characteristics, interference, cellular concepts including clustering, cell sectoring andsplitting,trafficengineering, pulsedetection,thematchedfilter, correlationreceivers, digitalmodulation,spread-spectrumsignaling, channel access methods including frequency division (FDMA), time division (TDMA), and code division (CDMA) multiple access. Prerequisites: Electrical Engineering 470. Spring.
EE 494 Senior Project Seminar (0) Provides guidance for the selection of a topic in the senior design project sequence. Projects, including industry-sponsoredprojects, presentedforstudentselection. Prerequisite: 12 hours of 300 -level electrical engineering courses. Spring.
EE 495 Senior Project Phase I (3) Plan the engineering project and formulate the preliminary design under the guidance offaculty and industrialadvisors.Seminarsessionsaddressprofessionalethicsand thesocial and political contexts ofengineering. Theeconomic, environmental,health, and safety aspects ofthe projectareaddressed in awrittenengineering proposal, asaretheissues ofmanufacturability and sustainability. An oral presentation of the proposal is required. Studentssubmitwritten reactiontoseminartopics. Prerequisites:EE 380, 494; GPA of at least 2.0. Fall, spring.
EE 497 Senior Project Phase II (3) Complete the design proposed in Electrical Engineering 495 and build a prototype. A formal design review conducted early in the semester. Written final report, oral report,anddemonstrationofthecompletedprojectrequired.Prerequisite: EE 495. Fall, spring.
EE 498 Independent Study in Electrical Engineering (1) (variable credit) Independent study of a topic of interest to the student. Requires faculty sponsor and approved detailed study plan.
EE 499 Special Topics in Electrical Engineering (1-3) Study of topics of special interest. Topics will be announced. May be repeated. Prerequisites announced when scheduled.

## Engineering (ENGR)

Interdepartmental engineering courses are taught by the faculty of the College of Engineering and Computer Science.Pre-engineering studentsandstudentsnotadmittedtotheCollegeofEngineeringand Computer Science may not enroll in any engineering (ENGR) course numbered200orabovewithoutspecific permission oftheinstructor, chair, or dean.
ENGR 071 Internship (0) Full-time employment for a period of 10-16weeksina professionalorparaprofessional roleassociated with the student's major.Students registerfor Engineering 07X in the Xth termofemployment.Requires priorapprovalofthejobdescriptionby theco-opdirectorordesignee and submission ofawritten summary and evaluation oftheworkexperience.May berepeatedforatotal of three experiences. Prerequisite: At least 18 hours of course work of whichatleastninehoursrepresentprogresstowardadegreeinengineeringorcomputersciencemusthavebeentakenduringtheprevious two academic terms.
ENGR 072 Internship (0) Full-time employment for a period of 10-16weeksinaprofessionalorparaprofessional roleassociatedwith the student's major. Students registerfor Engineering 07X in the Xth termofemployment.Requires priorapprovalofthejobdescriptionby theco-opdirectorordesigneeandsubmission ofa written summary andevaluation ofthe workexperience.May be repeatedforatotal of three experiences. Prerequisite: At least 18 hours of course work of whichatleastnine hours representprogresstowardadegreeinengi-
neeringorcomputersciencemusthavebeentakenduringtheprevious two academic terms.
ENGR 073 Internship (0) Full-time employment for a period of 10-16 weeksinaprofessionalorparaprofessional roleassociatedwith the student's major. Students registerfor Engineering 07X in the Xth termofemployment.Requirespriorapprovalofthejobdescriptionby theco-opdirectorordesigneeandsubmission of a writtensummary and evaluation ofthework experience. May be repeatedforatotal of three experiences. Prerequisite: At least 18 hours of course work of whichatleastninehours representprogresstowardadegreeinengineeringorcomputersciencemusthavebeentakenduringtheprevious two academic terms.

ENGR 081 Concurrent Co-op (0) Part-time employment in a professionalorparaprofessional roleassociated withthestudent's major. Students registerforEngineering08XintheXthtermofemployment. Requiresfull-timestudentstatus, priorapproval ofthejobdescription by the co-op director or designee and submission of a written summaryandevaluation oftheworkexperience.Studentsareexpectedto work no less than eight and no more than 15 hours per week. At least 10weeksofworkmustbecompletedduringthesemesterorsummer session. May be repeated. Corequisite: Registration for at least 12 hours of course work, of which at leastsix represent progress toward a degree in engineering or computer science during fall and spring semesters;registrationforsixhours,ofwhichthreerepresentprogress toward the degree during summer.
ENGR 082 Concurrent Co-op (0) Part-time employment in a professionalorparaprofessional roleassociatedwiththestudent's major. Students registerforEngineering08XintheXthtermofemployment. Requiresfull-timestudentstatus, priorapproval ofthejobdescription by the co-op director or designee and submission of a written summaryandevaluation oftheworkexperience.Studentsareexpectedto worknoless than eight and no more than 15 hours per week. At least 10weeksofworkmustbecompletedduringthesemesterorsummer session. May be repeated. Corequisite: Registration for at least 12 hours of coursework, of which at leastsix represent progress toward a degree in engineering or computer science during fall and spring semesters;registrationforsixhours,ofwhichthreerepresentprogress toward the degree during summer.
ENGR 083 Concurrent Co-op (0) Part-time employment in a professionalorparaprofessional roleassociated withthestudent'smajor. Students registerforEngineering08XintheXthtermofemployment. Requiresfull-timestudentstatus, priorapprovalofthejobdescription by the co-op director or designee and submission of a written summaryandevaluation oftheworkexperience.Studentsareexpectedto worknoless than eight and no more than 15 hours perweek. At least 10weeksofworkmustbecompletedduringthesemesterorsummer session. May be repeated. Corequisite: Registration for at least 12 hours of course work, of which at leastsix represent progress toward a degree in engineering or computer science during fall and spring semesters;registrationforsixhours,ofwhichthreerepresentprogress toward the degree during summer.
ENGR 084 Concurrent Co-op (0) Part-time employment in a professionalorparaprofessional roleassociatedwiththestudent's major. Students registerforEngineering08XintheXthtermofemployment. Requiresfull-timestudentstatus, priorapproval ofthejobdescription by the co-op director or designee and submission of a written summaryandevaluation oftheworkexperience.Studentsareexpectedto worknoless than eight and no more than 15 hours per week. At least 10weeksofworkmustbecompletedduringthesemesterorsummer session. May be repeated. Corequisite: Registration for at least 12 hours of course work, of which at leastsix represent progress toward a degree in engineering or computer science during fall and spring
semesters;registrationforsixhours,ofwhichthreerepresentprogress toward the degree during summer.
ENGR 085 Concurrent Co-op (0) Part-time employment in a professionalorparaprofessional roleassociated withthestudent'smajor. Students registerforEngineering08XintheXthtermofemployment. Requiresfull-timestudentstatus, priorapproval ofthejobdescription by the co-op director or designee and submission of a written summaryandevaluation oftheworkexperience.Studentsareexpectedto worknoless than eight and no morethan 15 hours perweek. At least 10weeksofworkmustbecompletedduring thesemesterorsummer session. May be repeated. Corequisite: Registration for at least 12 hours of course work, of which at leastsix represent progress toward a degree in engineering or computer science during fall and spring semesters;registrationforsixhours,ofwhichthreerepresentprogress toward the degree during summer.

ENGR 086 Concurrent Co-op (0) Part-time employment in a professionalorparaprofessionalroleassociatedwiththestudent'smajor. Students registerforEngineering08XintheXthtermofemployment. Requiresfull-timestudentstatus, priorapproval ofthejobdescription by the co-op director or designee and submission of a written summaryandevaluationoftheworkexperience.Studentsareexpectedto worknoless than eight and no morethan 15 hours per week. At least 10weeksofworkmustbecompletedduring thesemesterorsummer session. May be repeated. Corequisite: Registration for at least 12 hours of course work, of which at least six represent progresstoward a degree in engineering or computer science during fall and spring semesters;registrationforsixhours,ofwhichthreerepresentprogress toward the degree during summer.
ENGR 087 Concurrent Co-op (0) Part-time employment in a professionalorparaprofessional roleassociatedwiththestudent'smajor. Students registerforEngineering08XintheXthtermofemployment. Requiresfull-timestudentstatus, priorapproval ofthejobdescription by the co-op director or designee and submission of a written summaryandevaluationoftheworkexperience.Studentsareexpectedto work no less than eight and no more than 15 hours perweek. At least 10weeksofworkmustbecompletedduring thesemesterorsummer session. May be repeated. Corequisite: Registration for at least 12 hours of course work, of which at least six represent progresstoward a degree in engineering or computer science during fall and spring semesters;registrationforsixhours, of whichthreerepresentprogress toward the degree during summer.

ENGR 088 Concurrent Co-op (0) Part-time employment in a professionalorparaprofessionalroleassociatedwiththestudent'smajor. Students registerforEngineering08XintheXthtermofemployment. Requiresfull-timestudentstatus, priorapproval ofthejobdescription by the co-op director or designee and submission of a written summaryandevaluationoftheworkexperience.Studentsareexpectedto worknoless than eight and no morethan 15 hours perweek. At least 10weeksofworkmustbecompletedduringthesemesterorsummer session. May be repeated. Corequisite: Registration for at least 12 hours of course work, of which at least six represent progresstoward a degree in engineering or computer science during fall and spring semesters;registrationforsixhours,ofwhichthreerepresentprogress toward the degree during summer.
ENGR 089 Concurrent Co-op (0) Part-time employment in a professionalorparaprofessionalroleassociatedwiththestudent'smajor. Students registerforEngineering08XintheXthtermofemployment. Requiresfull-timestudentstatus, priorapproval ofthejobdescription by the co-op director or designee and submission of a written summaryandevaluationoftheworkexperience.Studentsareexpectedto work no less than eight and no more than 15 hours perweek. At least 10 weeksofworkmustbecompletedduringthesemesterorsummer
session. May be repeated. Corequisite: Registration for at least 12 hours of course work, of which at leastsix represent progress toward a degree in engineering or computer science during fall and spring semesters;registrationforsixhours,ofwhichthreerepresentprogress toward the degree during summer.
ENGR 100 Technical Learning Skills for International Students (3) Introduces technical concepts to students for whom English is a secondlanguage.Reviewsbasicmaterial frommathematics, physics, chemistry, andcomputerapplication withemphasison problemformulation, technical communication skills, and teamwork. Offered as needed.
ENGR 101 Introduction to Engineering (3) A hands-on introduction to civil, computer, electrical, and/or mechanical engineering.Topics include the use of the computer in engineering and an introduction to the design process. Student teams led by faculty (typically the students'academicadvisor) completedesign projects ina particular discipline.Prerequisite:Completion ofallrequiredEnglishlanguage courses or permission of instructor. Fall.
ENGR 102 Introduction to Engineering for International Students (3) Hands-on introduction to civil,computer, electrical and/or mechanicalengineering.Includestheuseofcomputersinengineering and an introduction to the design process. Completion of a project under the direction of a faculty member. Special attention given to proper use of the English language in engineering education and practice.EnrollmentlimitedtostudentsforwhomEnglishisasecond language. Credit not given for both ENGR 101 and 102. Offered as needed.
ENGR 123 Programming for Engineers (3) Introduction to structured programming of computers in a modern high level language. Students complete programming projects which include loop and branch constructs, the useofsubprograms, algorithm design, arrays, debugging software and techniques, file I/O and class constructs. Spring.
ENGR 189 Technical Skills (1) An independently studied laboratory course in which students carry out projects designed to teach basic technical skills in the student's field of interest. Repeatable course. Contentchangeseach timecourse is offered.Repeatableuptothree credit hours. Prerequisite: Permission of instructor.
ENGR 212 Statics (3) Includes resolution and composition of forces and moments using vector analysis, principles and application of equilibrium to trusses, beams, frames andmachines, centroidcalculations,secondmomentsofareas, internalloaddetermination,shear and moment diagrams, and friction. Prerequisite: MATH-221; C- or better, or permission of instructor. Fall, spring.
ENGR 213 Dynamics (3) Covers rectilinear and curvilinear motions, force, mass, acceleration, projectiles, pendulums, inertia forces in machines, work and energy, impulse and momentum, and impact. Prerequisite: ENGR 212 with a grade of C - or better. Fall, spring.
ENGR 230 Materials Science (3) Introduces properties of materials, discussesbonding, nature ofmetals, polymers,ceramics,crystalsand crystaldefects,andstructuresensitiveandinsensitiveproperties.Prerequisite: CHEM 118 or permission of instructor. Fall.
ENGR 232 Mechanics of Materials (3) Covers general principles of stress and strain, including elastic and inelastic behavior stress and straintransformation, stresscalculationsfordirectshearandtorsion; analysisofbeambehavior,includingflexuralstressesanddeflections, combined stresses, applications involving statically indeterminate systems, andbuckling ofcompressionmembers. Prerequisite:ENGR212 with a grade of C- or better. Fall, Spring.
ENGR 283 Technical Skills for Archaeologists I (2) Introduces
archaeology students to skills and techniques useful in field work. Topicsincludeintroductiontosurveyingequipment,measurementof distance, horizontal angles, traverses, differentialleveling, andmapping. Prerequisite: Sophomore standing. Fall.
ENGR 352 Numerical Methods for Engineers (3) Fundamental mathematical principles and techniques of numerical methods and how to apply them, using high level computer languages, to solve engineeringproblems.Developskillsinmathematicalcomputermodelingandanalysis ofengineering problems.Prerequisites:ENGR-213 and MATH-324, both with a grade of C- or better, or permission of instructor.
ENGR 366 Fluid Mechanics (3) Introduces the physical properties of fluids and the mechanics of fluid flow. Covers general properties of fluids,fluid statics and dynamics, and dimensional analysis. Applicationsstudiedincludepipesystems,aerodynamicdrag,openchannel flow, and compressible flow. Prerequisite: ENGR-213 with a grade of C- or better. Fall, Spring.
ENGR 390 Applied Engineering Mathematics (3) Develops understanding of practical mathematical analysis with applications in various engineering disciplines. Probability and statistical analysis. Practical numerical analysis. Linear algebra and matrices. Applications in civil, mechanical, and electrical engineering. Prerequisite: MATH 222. Fall, spring, summer.
ENGR 409 Engineering Economy and Decision Making (3) Introduction to engineering economy including cash-flow, time value of money, equivalence, annuities, present and future worth, rate of return, break-even analysis, replacement analysis, and benefit cost analysis.Includesindustrial costmeasurementtechniques,riskanalysis, and projectschedulingandmanagementtechniques.Casestudies and guests from industry offer realistic perspective.
ENGR 495 Interdisciplinary Design Project I (3) Preliminary planning and conceptual design for interdisciplinary project. Students formteamswithmembersfromseveralbranchesofengineeringand/ or other disciplines as appropriate to the project. Students participate in class discussions on professional ethics, scheduling and time management, technology and society, as developed in one of: Civil Engineering 495, ComputerScience 495, Electrical Engineering 495, Mechanical Engineering 495. Prerequisites: Permission of the College of Engineering and Computer Science Interdisciplinary Project Committee plus all prerequisites listed for one of CE 495, CS 495, EE 495, ME 495. Fall.
ENGR 497 Interdisciplinary Design Project II (3) Final design and construction of interdisciplinary project.Completion of workbegun inEngineering495.Studentsformteamswithmembersfromseveral branches of engineering and/or other disciplines as appropriate to the project. Teams make oral and written presentations to faculty advisorsand projectsponsor(s).Performancestandardsdevelopedin one of CE 497, CS 497, EE 497, ME 497. Prerequisites: Permission of the College of Engineering and Computer Science Interdisciplinary Project Committee; ENGR 495. Spring.
ENGR 498 Independent Study in Engineering Management (1) Independentresearchprojectinengineeringmanagement.Requires review ofcurrentliterature,interviewswith professionalrepresentatives, and otherforms of data collection appropriate for the research topic withresultsdocumentedinafinal researchreport.Prerequisite: ENGR 390 or 409 and permission of instructor.

## English (ENGL)

EnglishcoursesaretaughtbythefacultyoftheDepartmentofEnglish.
ENGL 110 Exposition (3) Focuses on writing skills and the larger elements of the expository essay: development of a central thesis,
organization ofmaterial,andresponsibleuseofsupportingdetail.The courseworkwillalso concentrateontheanalysis and construction of successfularguments,engagingstudentsinassignmentsandactivities that promotetheacquisition of critical reading, writing, andthinking skills appropriate to college-level discourse.
ENGL 120 Introduction to Literature (3) Provides an introduction toclosereading inthethreemajorgenres-fiction, poetry,anddrama. Studentswilllearntechnicalvocabularyappropriateforliteraryanalysisandwritefrequentpapersbasedon readingandclassdiscussion.
ENGL 122 Modern World Literatures (3) Covers poetry, short fiction, novel, and drama of the 20th and 21st centuries, primarily in translation.
ENGL 223 World Classics (3) Explores some of the world's finest imaginative literature from the age of Homer through the 19th century. Specific works vary from section to section.
ENGL 231 Masterpieces of British Literature I (3) Studies major works of British literature from 750 to 1780 . Includes such authors as Chaucer, Spenser, Marlowe, Jonson, Milton, Defoe, and Swift.

ENGL 232 Masterpieces of British Literature II (3) Examines classics of British literature from 1780 to 1945. Considers such authors as Wordsworth, Byron, Shelley, Dickens, Wilde, Lawrence, and Woolf.
ENGL 233 Masterpieces of British Literature III (3) Studies major works of British literature from 1945 to the present. Includes such authors as Beckett, Pinter, Churchill, Hughes, Duffy, Murdoch, and Rhys.
ENGL 241 Major American Writers I (3) Focuses on significant American works before the U.S. Civil War; the emphasis is on the centralfigures ofthe AmericanRenaissance, includingPoe,Emerson, Douglass, Thoreau, Hawthorne, Melville, Whitman, and Dickinson.
ENGL 242 Major American Writers II (3) Covers major American works from the U.S. Civil War to World War II. The course emphasizes writers such as Frost, Eliot, Faulkner, Cather, Hughes, Hemingway, Fitzgerald, and Steinbeck.
ENGL 243 Major American Writers III (3) Covers important American works published since World War II. The course may include writers such as Toni Morrison, James Baldwin, Philip Roth, John Updike, Tim O'Brien, Allen Ginsberg, JD Salinger, Bob Dylan, and Sylvia Plath.
ENGL 300 Early English Writers (3) Studies Anglo-Saxon verse as well as major works of later medieval literature such as The Canterbury Tales, Sir Gawain and the Green Knight, Pearl, Piers Plowman, Morte D'Arthur, and lyric poetry. Prerequisite: Complete one ENGL course or permission of instructor.
ENGL 310 The Renaissance \& 17th Century (3) Covers English literaturefromWyattandSurreythroughMilton. Prerequisite:Complete one ENGL course or permission of instructor.
ENGL 330 Special Topics in Literature (3) Focuses on particular writersoraparticularliterarymovement,subjectorperiod.Pasttopics have included Fitzgerald and Hemingway, Modern Irish Literature, and JRRTolkien. Repeatable up to threetimes with different subject. Prerequisite:CompleteoneENGL courseor permission ofinstructor.
ENGL 335 Children's Literature (3) Focuses on classic or "golden age" children's literature as it develops in the nineteenth and early twentieth centuries.Considersthelasting influenceofsuchliterature, andmayalsoincludestudy ofcontemporarypicturebooksand"second golden age" texts. Includes such writers as Carroll, Barrie, Baum, Burnett, Stevenson, Sewell, Grahame, Wilde, and Milne. Prerequisite: Complete one ENGL course or permission of instructor.

ENGL 340 Contemporary World Literatures (3) Explores contem-
porary literature (fiction, poetry, drama) in English and English translationfromaroundtheworld.Prerequisite:CompleteoneENGL course or permission of instructor.
ENGL 343 Norse Myth, Saga, and Legend (3) Studies the Eddas and sagasofNorwayandlcelandplus relatedworkselsewhereinnorthern Europe. Prerequisite: Complete one ENGL course or permission of instructor.
ENGL 344 Masterpieces of Russian Literature (3) Explores the great works of 19th and 20th century Russian literature with focus on such writers as Pushkin, Gogol, Turgenev, Dostoyevsky, Tolstoy, and Chekhov. Prerequisite: Complete one ENGL course or permission of instructor.
ENGL 348 Women's Literature: Special Topics (3) Focuses on women writers in a variety of genres and contexts. Repeatable upto 3 times with title change. Topics have included: 20th Century American Women Novelists, Modernism in Women's Literature, and The Works of Jane Austen. Prerequisite: One ENGL course or permission of instructor.
ENGL 350 Shakespeare (3) Studies 8 of Shakespeare's greatest plays. This course engages with histories, the comedies and the tragedies. Prerequisite:Completeone ENGLcourseorpermission of instructor.

ENGL 351 The British Novel (3) Explores the development of the British novel with focus on such major authors as Defoe, Goldsmith, Austen, Bronte, Dickens, Hardy, Joyce, and Woolf. Prerequisite: Complete one ENGL course or permission of instructor.
ENGL 352 Young Adult Novel (3) Explores the contemporary young adultnovel in context of the developing novel.Emphasizes diversity of genre and cultural/social context, and may include such authors as Alexie, LeGuin, Dickens, L'Engle, Meyer, Rowling, and Yang. Prerequisite:Completeone ENGLcourseorpermission of instructor.
ENGL 353 The American Novel (3) Surveys several landmark achievements inthe American Novel. This coursemay includeworks by Melville, James, Cather, Fitzgerald, Hemingway, Faulkner, and others. Prerequisite: Complete one ENGL course or permission of instructor.
ENGL 361 African-American Literature (3) Focuses on significant texts and major aesthetic achievements of the African-American tradition, as well as their historical contexts. Includes politically and socially significant drama, poetry, short stories, novels, and essays. Prerequisite:Completeone ENGL courseorpermission ofinstructor.
ENGL 370 Age of Enlightenment (3) Studies eighteenth-century British figures such as Pope, Swift, Johnson, Boswell, Sheridan and Goldsmith. Prerequisite: Complete one ENGL course or permission of instructor.
ENGL 375 The Romantic Movement (3) Covers major English writers from 1789 to 1837. Emphasizes Wordsworth, Coleridge, Byron, Shelley and Keats. Prerequisite: Complete one ENGL course or permission of instructor.
ENGL 380 The Victorian Period (3) Explores British literature from 1837 to 1901, with emphasis on the Victorian writer as poet, sage, and novelist. Includes such authors as Barrett, Browning, Tennyson, Newman, Gaskell, and Dickens. Prerequisite: Complete one ENGL course or permission of instructor.
ENGL 385 The Twentieth Century (3) Focuses on various authors, genres, andliterarymovements inthetwentiethcentury, depending on the emphasis chosen by the professor. Past topics have included American immigrant literature and European modernism. May be taken two times by permission of instructor. Prerequisite:Complete one ENGL course or permission of instructor.

ENGL 399 IndependentStudy in Literature (1-3) Provides the opportunity to do an independent study in English-language literature. This course might beone-on-one with a designated professororina small group. Prerequisite:Complete one ENGL course or permission of instructor.
ENGL 445 Seminar in Literary Criticism (3) Introduces the student to major literary critics, from Plato to the present, and covers critical approachestodrama,fictionand poetry.Prerequisite:Completeone ENGL course or permission of instructor.
ENGL 480 Literature \& Its Relations (3) Relates a body of literature to theoretical and/or artistic works of kindred disciplines. Specific topics vary from semester to semester. Capstone course for English majors. Prerequisite: Complete one ENGL course or permission of instructor.

ENGL 495 Capstone Experience in Literature (1) A one credit hour course that must be taken in conjunction with an approved three credit hour English (literature) course, 300 or 400 level, in order to meet the general education capstone requirement.

## English Language (EL)

English language courses are taught by the faculty of the Intensive English Center. Enrollment is limited to students whose native language is other than English. A nonnative speaker of English may use up to nine hours of English language courses as elective credit if the student's program of study permits free electives.
EL 102 Pronunciation and Listening Comprehension (2) Focus on pronunciation problems and aural comprehension skills. Listening dictationwithemphasisonnote-takingskillsisamajorpartofcourse. Offered first half of each semester.
EL 103 Academic Conversation and Speaking (2) Focus on ability toparticipateeffectively inopendiscussionsandingiving speeches. Emphasisonlisteningtolecturesandcomprehendinganddiscussing main ideas. Continued pronunciation practice included. Oral presentations may berequired.Offered the second halfofthe semester.
EL 106 Reading Development (2) Emphasizes a number of reading skills including skimming, inference, and dictionary usage. AppropriatefortheUniversitystudentwhohas learned English as aforeign language. Reading selections may be both prose and non-prose. Vocabularydevelopmentandreadingcomprehensionthroughcontext emphasized. Offered the first half of each semester.
EL 107 Advanced Reading (2) Expands upon skills learned in English Language 106andenablesstudentstoimprovecomprehensionofaca-demicwriting.Readingselectionsmaybebothproseandnon-prose. Class activities include discussion, group work, projects, and written exercises. Offered the second half of each semester.

EL 110 Fund of Composition (3) For students whose primary language is not English. Provides instruction in writing English sentences, well-organized paragraphs,shortcompositions, andresearch paperformat.Attentiongiventoallaspectsofcomposition-sentence structure, grammar, vocabulary, spelling, and punctuation.
EL 111 Advanced Composition (3) For students whose primary language is not English. Builds on writing skills studied in English Language 110 and applies these to compositions, reaction papers, andresearch papers.Emphasiscentersonvocabularychoice,syntax, conciseness, andreader-interesttechniques.Prerequisite:EnglishLanguage 110 ordemonstrated proficiencyonaUEadministeredwriting placement exam.

## Environmental Studies (ES)

Environmentalstudiescoursesaretaughtbyfacultymembersofvar-
ious departments.
ES 103 Fundamentals of Environmental Science (3) Introduces interdisciplinary nature of problems relating to the human environment, including social, political, and economic aspects.
ES 240 Alternative Energy \& Energy Efficiency (3) The student team in this course will study current and developing alternative energy technologies to learn about the feasibility of installing them in commercial and residential buildings in Evansville. They will gain hands-onexperiencebytakingclientsfromthecommunityandthoroughly evaluating their buildings' energy use, its available solar and wind resources, waste heat, and power and heating needs. They will do calculations to determine feasibility of using various alternative energyandenergyefficiencytechnologiesandmakerecommendations on their implementation.

ES 299 Special Topics in Environmental Studies (1-4 credits) Lecture, discussion, and/or lab devoted to a topic not covered in regular environmentalstudiescourses.Topicsvarydependingoninterestsof facultyandstudents.Mayberepeated.Prerequisitesannouncedwhen scheduled. Fall, spring.
ES 360 Science of Environmental Pollutants (3) Using discussion formatandstudent presentations, courseclarifiesthe sources of pollutantsandtheirtransportintheenvironmentanddiscussesmonitoring and remediation of pollution. Special attention given to pollution of theatmosphere,surfacewater,andgroundwater.Presumesafamiliaritywithecologicalconcepts.Somediscussionofimportantlegislation related to pollution incorporated. Prerequisite: CHEM 118. Recommended: BIOL 118 or ES 103

ES 440 Environmental Law and the Regulatory Process (3) Analysis of political and organizational processes that influence theformulation, implementation, and evaluation of public policy. Focus placed onecosystems, population,biodiversity, andglobalaswellasdomestic governance. Prerequisites: BIOL 118 or ES 103; PSCI 143.
ES 441 Alternative Energy \& Energy Efficiency (3) The student team in this course will study current and developing alternative energy technologies to learn about the feasibility of installing them in commercial and residential buildings in Evansville. They will gain hands-onexperiencebytakingclientsfromthecommunityandthoroughly evaluating their buildings' energy use, its available solar and wind resources, waste heat, and power and heating needs. They will docalculationstodeterminethefeasibility ofusingvariousalternative energyandenergyefficiencytechnologiesandmakerecommendationsontheirimplementation.ES441 is appropriateforstudentswho wanttoearn400-levelcreditforthealternativeenergycourseandwill assumealeadership/managementroleinthecourse.Studentswhodo not want a leadership role are encouraged to enroll in ES 240.
ES 495 Environmental Studies Internship (1) (3-8 credits) Field experienceforenvironmental studies majors under the supervision of a professional in an environmentally related area. Prerequisite: Written application for internship must be received by the environmental studies program director prior to beginning the internship. Fall, spring.
ES 499 Advanced Special Topics in Environmental Studies (1-4 credits) Lecture, discussion, and/or lab devoted to an advanced topic not coveredinregularenvironmentalstudiescourses.Topicsvarydependingoninterestsoffacultyandstudents.Mayberepeated.Prerequisites announced when scheduled. Fall, spring.

## Ethics and Social Change (ETH)

Ethics and Social Change courses are taught by faculty members of the Department of Philosophy and Religion.
ETH 121 Introduction to Ethics (3) Presents a systematic and histor-
ical discussion of moral and social values through classical and contemporaryreadings.Emphasisonapplyingmoraltheoriestoconcrete moral problems.
ETH 200 Social Justice Movements (3) This course provides an introductiontotheroleofworldreligionsinawiderangeofliberation struggles and social justice movements from around the globe.
ETH 201 Religious Ethics (3) Provides an introduction to religious moral thinking, paying attention to the basis, nature, content, and consequences of ethical thought and the religious traditions that address them. Includes a close study and discussion of various approachestoethicsasembeddedintheworld'smostwidespreadreligioustraditions (particularly Christianity, Judaism, Islam,Buddhism, Hinduism,etc.) as wellasananalysis ofselected contemporaryissues suchas violenceand war,euthanasia, abortion, sexuality, and racism.

ETH 301 Selected Topics in Ethics and Social Change (3) Studies selectedtopics relatedtoethics.Specifictopicsmayvaryeachtimethe course is taught.May be repeated for credit as the selection oftopics changes. Prerequisite: One course in ethics, philosophy, or religion; or permission of instructor.
ETH 345 Complex Systems \& Social Change (3) Studies dynamics ofsocialchangefromacomplexsystemsprospective.Focusesonbasic concepts (e.g., resilience, robustness, phase change, self-organized criticality,etc.) insofarastheycharacterizecollectivehumanbehavior in social situations. Specific topics may include bias contagion and prejudice reduction, civilunrest and protestbehavior, human rights propagation, andtheevolution ofcooperation. Includesacomputer modelingcomponent,butnopreviousknowledgeofmathematicsor computer programming is necessary. Prerequisite:Majororminorin Ethics and Social Change, or permission of instructor.
ETH 375 Social Change Field Experience (3) Offers students the opportunityforsupervisedfieldexperienceinanareaofworkdirectly relevanttoethicsandsocialchange, underthedirection ofamember of the Ethics Committee. To be completed by the end of sophomore year. Prerequisite: ETH 121. Open only to students majoring or minoring in Ethics and Social Change.
ETH 475 Social Change Field Experience (3) Offers advanced students the opportunity for supervised field experience in an area of workdirectly relevanttoethicsandsocialchange, underthedirection of a member of the Ethics Committee. Prerequisite: ETH-200. Junior or senior standing. Open only to students majoring or minoring in Ethics and Social Change.
ETH 491 Direct Study in Ethics Social and Change (1) Offers the opportunityforindependentresearchinspecial problemsunderthe direction of a member of the ethics faculty. Repeatable course. Content changes each time course is offered. Prerequisite: Permission of instructor.
ETH 499 Ethics and Social Change (3) Provides opportunity for integration of the academic study of ethics with a particular ethical problem. Prerequisite: Senior standing and ETH 121, ETH 200 and ETH 375, or permission of instructor.

## Exercise and Sport Science (EXSS)

Exercise and sport science courses are taught by the faculty of the School of Public Health.
EXSS 112 Human Anatomy and Physiology 1 (4) First half of a two-semester course that provides a comprehensive study of the structure and function of the human body, from the cell to the entire organism.Usesasystemsapproachemphasizing howthesesystems work together to maintain homeostasis. Systems studied include: integumentary, skeletal, muscular, digestive, reproductive. Three hours lecture, two hours lab.

EXSS 113 Human Anatomy and Physiology 2 (4) Second half of a two-semestercoursecontinuesstudy ofthestructureandfunction of thehumanbody usingasystemsapproach.Systemsstudiedinclude: nervous, endocrine, circulatory, immune, respiratory, urinary. Three hours lecture, two hours lab. Prerequisite: EXSS 112 with a grade of C- or better.
EXSS 150 Introduction to Health Sciences (2) Overview of the career opportunities available in exercise and sport science. Each student develops a personal profile which includes factors that influence an individual'scareerchoice.Includedinthisprofile is thedevelopment of both a personal and professional philosophy, assessment ofone's lifestylepreferences, plusa professionalresearch projectinone'spreferred career choice.
EXSS 201 Intro to Sport Management (3) This course introduces the studenttothesportmanagementprofession.Primaryfocus is onthe sportindustry,including professional sportentertainment,amateur sport entertainment, for-profit sport participation, nonprofit sport participation,sportinggoods,sportstourismandsportservices.This classwill providethefoundationforconcepts relatedtothemanagement, marketing, legal and social aspects of sport management.
EXSS 211 History of Sport (3) Using interacting influences of economics, environment, nationalism, norms and values, philosophy, politics, religion, and technology, the evolution of physical activity and sport is investigated. Concentration is placed on Western Civilization and American sports. Special attention devoted to modern Olympic Games.
EXSS 218 Social Aspects of Sport (3) Explores the social roots of sportincontemporarysociety.Studentthinkscriticallyaboutsports toidentifyandunderstandsocial problemsandissuesassociatedwith sports in society. This class examines issues of physical performance and records to see sports as social constructions that influence how people feel, think, and live. Emphasis is placed on American sport and society.
EXSS 220 Essentials of Human Anatomy \& Physiology (4) Provides the essential details of anatomy and physiology of the body systems. Topicsandsystemscoveredincludecells,tissuesandorgans,grossanatomy,and physiologyofthenervous,endocrine,cardiovascular,respiratory, urinary, digestive, reproductive, muscular, and skeletal systems.
EXSS 222 Youth Fitness \& Health Awareness (2) Students apply professional skills working with young people of various ages from theEvansvillecommunity.Students participateininteractiveeducationalworkshops.Theworkshopsincreaseknowledgeandencourage healthy lifestyle choices in the youth of Evansville.
EXSS 244 Practicum (1) A directed experience for the student who demonstratesacareerinterestinoneofthemajorsofferedwithinthe Department of Exercise and SportScience. Prerequisite: EXSS 150 or consent of instructor.
EXSS 245 Practicum (1) A directed experience for the student who demonstratesacareerinterestinoneofthemajorsoffered withinthe Department of Exercise and Sport Science. Prerequisite: EXSS 150 or consent of instructor.

EXSS 250 Officiating (1) Covers rules and procedures for officiating and provides opportunities for IHSAA certification in specific sports. Also offers practical experience in officiating.
EXSS 255 Recreational Sports Programming (2) Examines the fundamentalaspectsofarecreationalsports programinvariedsettings. These settings include educational, industrial, correctional, public/ private,commercial, andmunicipal.Uponcompletionofthis course, studentsunderstandtournamentandfacilityscheduling, participant development,equipmentconcerns,legalandfinancialconcerns, and
other aspects of recreational sports programming.
EXSS 310 Sport Law \& Ethics (3) Provides students with an overview of US law and how it applies to the sport industry. Topics includetort law, contract law, anti-trust law, and constitutional law. It also helps students learn to question, reason, and think in a fashion that will aid them in ethical dilemmas they may face in their future careers. Prerequisite: EXSS 150 or permission of instructor.
EXSS 320 Nutrition for Performance \& Health (3) Provides an overview of the important concepts of nutrition that are required forathletic performance and general health benefits.Currenttopics in nutrition, team nutrition, performance, ergogenic aids, and diets reviewed and critiqued. Prerequisite: Permission of instructor.
EXSS 350 Sport Facility and Event Mgt (3) The purpose of this course is to educate students with a broad knowledge infacilityand event management. Students will learn fundamental skills that are necessary for sportmanagerstorunafacility orhostanevent.Topics include management theory, planning, facility systems, site design, volunteermanagement,andsocialresponsibility.Prerequisites:EXSS 150; or permission of instructor.
EXSS 352 Physiology of Exercise (3) Introduces the physiological changesassociated withexerciseandsporttraining.Concentrateson cardiorespiratory, muscular, and metabolic adaptations to training, and how thesechanges affecthuman performance. This coursealso examinestheinfluenceofenvironmentalfactorsandergogenicaids upon exercise and athletic performance. Prerequisites: EXSS 112, 113 or 220.
EXSS 355 Practicum Intramural-Recreational Sports (1) Because coursefocusesonpracticalapplication ofrunningrecreationalsports programs,studentsarerequiredto(1)plan,implement, andresearch new and existing events and sports offered within the existing UE intramural program;(2) areon-site during many oftheevents to gain supervisoryexperienceineventmanagement;and(3)receiveindividual instruction from the intramural director and staff. Prerequisite: EXSS 255.
EXSS 356 Biomechanics (3) Covers principles of anatomy, physiology, physics, andotherrelatedsciences appliedtoanalysis ofmotion. Prerequisites: Junior or senior standing; PHYS 100 or 121.
EXSS 383 Cur Dev. Lifetime Fitness Act. (3) Provides an understanding of the concepts, movements, skills, and abilities needed to teachand participateinvarioushealth-relatedfitnessandrecreational activitiesthroughoutlife.Alsogivesstudentanopportunitytoteach various health-related fitness and recreational activities to diverse populations. Prerequisite: EXSS 112 and 113, or 220.
EXSS 384 Lifeguarding (2) Provides the knowledge and skills necessaryforthestudenttorecognizeandeliminateorminimizepotential dangers at various types of swimming and diving facilities. Course content includes American Red Cross CPR certification for the professional rescuer. Additionally, the American Red Cross certification is available to successful candidates. Prerequisite:Permission of instructor.
EXSS 388 Exercise Prescription (3) Introduces and examines the anatomicandphysiologicprinciplesforprescribingexercise.Emphasis on skills required toevaluatefitnesslevels and develop programsfor various components offitness, including cardiorespiratory, flexibility, body composition, and strength for a variety of populations. Prerequisites: Junior or senior standing; EXSS 352; or permission of instructor.
EXSS 400 Principles Theories Strength \& Conditioning (3) Provides practical skills necessary to design strength and conditioning programs. Special emphasis placed on ability to evaluate exercise
movements,prescribeappropriateexerciseprograms,administertests, and support program prescription with a sound knowledge of anatomicaland physiologicaladaptationtoexercise.Includeslaboratory experiences that teach skills such as how to organize speed, agility, andquicknessdrills;howtoselectandadministerappropriatetestsfor athleticperformance;andhowtoevaluateOlympicliftingtechnique. Prerequisites: EXSS 112 and 113,352 and 388.

EXSS 415 Exercise Physiology II (2) A continuation of Exercise and SportScience352.Focuses on cardiovascular, respiratory, andmetabolicresponsestoexercise.Emphasisonproperlaboratorytechniques, data collection, and data interpretation. Prerequisite: EXSS 352.
EXSS 417 Advanced Exercise Science (3) Provides an in-depth study of selected topics not contained in the required course work. Topics chosen from the following areas:anatomy,biomechanics, statistical analysis, and exercise physiology.Prerequisites:EXSS352;orpermission of instructor.

EXSS 427 Exercise Testing \& Leadership (2) The application of exercisephysiologyand prescriptiontoexaminethephysiologicresponses toexercise.Emphasisisplacedonappropriatetestingmethodologies, formulation ofexerciseprescriptions, and safeexerciseleadershipin a diverse population of individuals. Prerequisites: EXSS 352, 388; current CPR; or permission of instructor.

EXSS 428 Cardiac Rehab (3) A study of pathophysiology of common heartdiseases with concentrationinthedesignimplementationand administration ofmultidimensionaltherapeuticcardiacrehabilitation program.
EXSS 451 Exercise/Sport Psychology (3) Provides an overview of the rapidlydevelopingfieldsofexerciseandsportpsychology,including psychologicalaspectsofsportperformanceandpsychometriccharacteristics of sportparticipants. Topics in thisclass includetherelationship ofexercisetomental health.Specialemphasisontheoreticaland research issues important in the field of sport psychology is given. Prerequisites: Junior or senior standing or permission of instructor; PSYC 121.
EXSS 452 Adapted Physical Ed for K-12 Grades (3) Provides instructioninappropriateteachingmethodsandstrategiesofincorporating appropriategamesandactivitiesforchildrenwithspecialneeds.Studentslearntodevelopandimplementanadapted physicaleducation curriculumforchildreninelementarythroughhighschool.Prerequisite: Junior or senior standing or permission of instructor.
EXSS 453 Motor Learning (2) Provides an overview of the factors that affecttheacquisitionand performanceofmotorskills.Topicsinclude theneuralbasisofhumanmovement,perception,psychomotorlearningandtheories ofneuromuscularintegration,information processing, andindividual differences.Methodsforstructuring thelearning environmentforoptimallearningalsodiscussed.Prerequisites:EXSS 356 or permission of instructor.
EXSS 478 Clinical Laboratory Science Clinical (0) Credit granted upon successful completion of two semesters of clinical experience andasummerclinical.Prerequisite:Successfuladmissionintoclinical laboratory program.

EXSS 482 Curriculum Development in Individual and Team Sports (3) Provides a comprehensive understanding oftheteaching of individualandteam sports.Alsooffersstudentstheopportunitytoteach themovementsandskillsneededto participateinlifetimeindividual sports, as well as the ability to design and implement lesson plans. Focusofcourseonsecondaryphysicaleducation.Prerequisites:EXSS 112 and 113, or 220.
EXSS 488 Internship (2-12 credits) Provides the exercise and sport sciencemajorpracticalexperienceinaspecializedcareerarea.Fosters
developmentofskills, competencies, andorganizationalandadministrative techniques needed for successful entry into the work force, whileworkingunderdirectsupervisionofselected professionals.Prerequisites: Exercise and Sport Science 150 for sport communication and sport management majors; EXSS 352, 388, and current CPR for all exercise science majors.
EXSS 491 Planning/Implement Coaching (2) Provides an in-depth overviewofthecompetenciestocoachinaspecificsportarea.Covers advancedtechniquesforteaching,coaching,and performing.Prerequisite: Junior or senior standing.
EXSS 493 Current Issues Exercise \& Sport Science (3) The capstone course for all majors in the department. Discussion topics include research methodology, the use of basic statistics and other selected areas ofresearch design.Studentslearntocritically readandevaluate research papers. Additionally, discussion and writing focuses on the current and future status of the student's career choice in today's society. Prerequisite: Final year status for majors in the department.

EXSS 499 Special Topics Exer Sport Science (1-3 credits) Provides students the opportunity to study topics of special interest not covered in regular course offerings. Topics announced. Course may be repeated,butthetopicmustbedifferent. Prerequisite:Permission of instructor.

EXSS 221L Applied Human Anat/Phy Lab (2) Utilizes an in-depth regionalapproachtothestudy ofhumananatomythroughtheuseof previously dissected human cadavers. Prerequisites: EXSS 112, 221; or permission of instructor.
EXSS 321L Applied Human Anat/Phy Lab (2) Utilizes an in-depth regionalapproachtothestudy ofhumananatomythroughtheuseof previously dissected human cadavers. Prerequisites: EXSS 112, 221; or permission of instructor.

## Experiential Education (EXED)

EXED 071 Internship (0-1) Full-time or part-time employment for a period of 10-16 weeks in a professional or paraprofessional role associated with the student's major. Requires prior approval of the job description by the co-op director or designee and submission of a written summary and evaluation of the work experience. May be repeatedforatotalofthreeexperiences.Prerequisite:Atleast 18 hours ofcourseworkofwhichatleastninehoursrepresentprogresstoward degreecompletionandmusthavebeentakenduringtheprevioustwo academic terms.

EXED 072 Internship (0-1) Full-time or part-time employment for a period of 10-16 weeks in a professional or paraprofessional role associated with the student's major. Requires prior approval of the job description bythe co-op directorordesignee and submission of a written summary and evaluation of the work experience. May be repeatedforatotalofthreeexperiences. Prerequisite:Atleast 18hours ofcourseworkofwhichatleastninehours representprogresstoward degreecompletionandmusthavebeentakenduringtheprevioustwo academic terms.

EXED 073 Internship (0-1) Full-time or part-time employment for a period of 10-16 weeks in a professional or paraprofessional role associated with the student's major. Requires prior approval of the job description bythe co-op director or designee and submission of a written summary and evaluation of the work experience. May be repeatedforatotalofthreeexperiences. Prerequisite:Atleast 18hours ofcourseworkofwhichatleastninehours representprogresstoward degreecompletionandmusthavebeentakenduringtheprevioustwo academic terms.
EXED 090 Building a Professional Image (0-1) Seminar for second yearstudentsseekinganinternshiporconsideringenteringtheco-op
programforthefirsttime. Coversjobinterviewing, résumé preparation, currentlyavailableinternandco-opjobs, anddetailsofprogram administration. Application for admission to the co-op program is part of this seminar. Fall, spring.

## Finance (FIN)

Finance courses are taught by the faculty of the Department of Accounting and Business Administration. All courses are subject to the leveling policy and prerequisite requirements of the Schroeder Family School of Business Administration. See the "Schroeder Family School of Business Administration" section of this catalog for the complete leveling policy.
FIN 280 Introduction to Personal Finance (3) Covers information that allows students to begin their working careers well informed of theirfinancial responsibilities. Covers the fundamentals of personal financeandemphasizes the lifecycleapproach to personalfinancial planning. Primary goals of course are (a) make participants aware of need to plan their financial future and (b) increase their knowledge ofthevarious aspects of personal finance in orderto plantheirfinancial future effectively. Major topics are managing assets, credit and insurance,investments, andretirementplanning.Helpsparticipants beginlifelongjourneytowardfinancialliteracy.Offeredperiodically.
FIN 361 Fundamentals of Finance (3) Introduces core principles of time value of money, risk return analysis, financial forecasting, and security valuation. Analyzes foundations of capital budgeting techniques, cash flow estimation, taxation, and depreciation methods. Prerequisites: ACCT 210; ECON 102; or permission of instructor.

FIN 362 Corporate Financial Policy (3) Examines the capital budgeting, financing, dividend policy, and working capital decisions of value-maximizing firms with use of casestudies. Prerequisite:Grade of C- or better in FIN 361. Spring.
FIN 380 Special Topics in Finance (3) Covers topics not included in other courses, providesin-depth understanding ofselected areas in finance, and explores relevant current topics. Repeatable course. Content changes each time course is offered. Prerequisite: Grade of C- or better in FIN 361. Offered periodically.
FIN 383 Credit Analysis Lending Practicum I (3) This course sequenceisanexperientiallearning programthatengagesstudents directly with a participating lending institution. Students will team withsupervisingfacultyandcommerciallending professionalsinthe processofassessingapplicationsforcommercialloans,formulation of lending decisions, and execution of the lending process. Additional emphasisisontheeffectsoflendingoutcomesonthebank'sfinancial statements.A maximum of 3 credithours of practicum from FIN 383, 384,385 , and 386 will apply as an upper level elective in the major areaperdegreeforstudentspursuingtheBachelorofSciencedegreein Accounting;theBachelorofSciencedegreeinBusinessAdministration; ortheBachelorofSciencedegreewithamajorineconomics.Additional hours will count as free electives. Prerequisite: Grade of C- or better in FIN 361 or permission of instructor.
FIN 384 Credit Analysis Lending Practicum II (3) This course sequenceisan experientiallearning programthatengagesstudents directly with a participating lending institution. Students will team with supervisingfacultyand commerciallending professionalsinthe processofassessingapplicationsforcommercialloans,formulation of lending decisions, and execution of the lending process. Additional emphasisisontheeffectsoflendingoutcomesonthebank'sfinancial statements. A maximum of 3 credithours of practicum from FIN 383, 384,385 , and 386 will apply as an upper level elective in the major areaperdegreeforstudentspursuingtheBachelorofSciencedegree in Accounting; the Bachelor of Science degree in Business Adminis-
tration;ortheBachelorofScience degree with amajorineconomics. Additional hours will count as free electives. Prerequisite: Grade of B or better in FIN 383.
FIN 385 Wealth Management Practicum I (2) This course sequence is an experiential learning program that engages students directly with individual clients in a participating wealth management firm. Studentswillteam withsupervisingfacultyandwealthmanagement professionalsintheprocessofclientconsultation,formationofclients' investmentobjectives,execution ofportfoliostrategies, andevaluation of investment outcomes. A maximum of 3 credit hours of practicum from FIN $383,384,385$, and 386 will apply as an upper level elective in the major area per degree for students pursuing the Bachelor of SciencedegreeinAccounting;theBachelorofSciencedegreeinBusinessAdministration;ortheBachelorofSciencedegreewithamajorin economics.Additionalhourswillcountasfreeelectives.Prerequisite: Grade of C- or better in FIN 361 or permission of instructor.
FIN 386 Wealth Management Practicum II (2) This course sequence is an experiential learning program that engages students directly with individual clients in a participating wealth management firm. Studentswillteam withsupervisingfacultyandwealthmanagement professionals in the process of client consultation, formation of clients'investmentobjectives,execution ofportfoliostrategies,and evaluation of investmentoutcomes. A maximum of 3 credit hours of practicum from FIN $383,384,385$, and 386 will apply as an upper level elective in the major area per degree for students pursuing the Bachelor of Science degree in Accounting; the Bachelor of Science degreein BusinessAdministration;ortheBachelorofSciencedegree with a major in economics. Additional hours will count as free electives. Prerequisite: Grade of B or better in FIN 385.
FIN 395 Independent Study (1-3) Independent research in finance conducted under faculty supervision. Prerequisites: Grade of C- or better in FIN 361, permission of instructor.
FIN 426 International Financial Management (3) Analyzes foreign exchange,currencyfutures,andoptionsmarkets.Examinesaspectsof international banking,bond, andequity marketsfromtheperspective ofmultinational corporationsandinstitutions.Prerequisites:Gradeof C- or better in ECON 101 and 102. Recommended: FIN 361.

FIN 427 Financial Derivatives \& Alt Investments (3) The course introducesfinancialderivativesandtheirapplications.Topicsinclude features of primary financial derivatives (forwards, futures, swaps, and options), the basics of derivatives analysis, and the structure of theirmarkets.Thecoursealsocoverssomeadvancedtopicsininvestmentstrategiesandriskmanagement;includesdiscussion ofalternativeinvestmentsandinvestingincommodities.Prerequisite:Gradeof C- or better in FIN 361 or MATH 330.

FIN 462 Investments (3) Develops the principles governing investment of personal funds based on modern capital market theory. Common stocks, bonds, options, and futures contracts analyzed. Prerequisite: Grade of C- or better in FIN 361.
FIN 470 Financial Institutions/Markets (3) The operation and management of financial institutions and the markets in which they operatediscussed.Managerialandpublicpolicyissuestowardfinancial institutions and markets also addressed. Prerequisite: Grade of C- or better in FIN 361. Offered alternate years. Same as ECON 470.
FIN 478 Risk Management (3) Examines the principles and terminologiesofinsurance.Analyzesvariety ofinsurancecontractsandrisk management plans. Discusses the public policy issues related to the insurance industry. Prerequisite: Grade of C- or better in FIN 361. Offered periodically.
FIN 482 Financial Planning: Process/Environment (3) Financial
planning principles, areas, application, process, effective communication,riskevaluations, ethicsand practicestandards,financial planning problem solving, regulations,financialinstitutions. Prerequisite: Grade of C- or better in FIN 361. Offered periodically.

## First-Year Seminar (FYS)

The First-Year Seminar Sequence is the cornerstone of the Enduring Foundations General Education program. The courses are taught by faculty members from all of the University's colleges and schools.
FYS 111 First Year Seminar (3) Topic-based seminar developed by individualfacultymembers.Engagesstudentsinclassroomactivities that promotetheacquisition ofcritical reading, writing, andthinking skillsappropriatetocollege-leveldiscourse.Towardthatend,students willlearnthebasicsoftheexpositoryessay:developmentofacentral thesis, organization of material, and responsible use of supporting detail.

FYS 112 First Year Seminar (3) Topic-based seminar developed by individualfacultymembers.Engagesstudentsinclassroomactivities that promotetheacquisitionofcritical reading, writing, andthinking skillsappropriatetocollege-leveldiscourse.Towardthatend,students will complete a significant research paper. Prerequisites: Placement based on ACT/SAT scores, Grade of C or better in FYS 111 or FYS 111 E .
FYS 312 Writing Across the Disciplines (3) First Year Seminar for transferstudents.Engages students in classroom activitiesthat promote the acquisition of critical reading, writing, and thinking skills appropriatetocollege-leveldiscourse.Towardthatend,studentswill learnthebasics oftheexpositoryessay:developmentofacentralthesis,organization ofmaterial, andresponsibleuseofsupporting detail. Additionally, they will explore a variety of genres as well as writing practices and conventions for disciplines across the university.
FYS 499 Teaching Internship (3) Offers students the opportunity for supervised field experience in teaching at the college level.
FYS 111E First Year Seminar for EL Students (4) All sections of FYS 111 and 111E engage students in activities that promote the acquisition of critical reading, writing, and thinking skills necessary in collegiatediscourseaswellas in professionaland personal contexts. Toward that end, students will learn the basics of the expository essay:development of a central thesis, organization of material, and responsible use of supporting detail with emphasis on the writing process and rhetorical situation. First Year Seminar for EL Students provides additional structured support for ESL students in order to aid in the transition to college level courses that are reading and writing intensive.

## Foreign Languages and Cultures (FLC)

Foreign Languages and Cultures courses are taught by the faculty of the Department of Foreign Languages and Cultures.
FLC 201 International Road Film (3) This course centers on the international road film. We will focus on the aesthetics as well as the content of the road film, in order to examine the genre as an art form and to explore different cultures. What can we learn about the literal, linguistic, political, national, historical, cultural, gendered, classed, etc.landscapes/geographies through which the characters travel? What causes them to travel? How do the films define travel? Film selections to be discussed come from the U.S., France, Germany, India, Latin America, Mongolia, Bhutan, Russia, Hungary, and Jordan.
FLC 230 Ethnic/Racial Representations (3) The course focuses on cross-cultural representations of the "other" in Hispanic/German/ French/Francophonecultures.Topicsvary.Canberepeated withcon-
tentchange. Representations of Native Americans, Asians, Africans, African Americans, Afro-Germans, Hispanics, Jews, Arabs, Islanders, etc. in world film and literature will be analyzed.
FLC 301 Topics in German, Austrian, Swiss Studies (3) This course is offered in Englishfornon-German minors and majors. Topics vary. Repeatable course with content change. Topics range from aspects of German film, the Alps, crime novels, biographies, YA literature in translation, Berlin, Vienna, Bern, Kafka, Bachmann, Soccer and German identity, to other aspects of German, Austrian, and Ger-man-speaking Swiss culture and society.
FLC 333 Topics in Diaspora Studies (3) Course engages with issues of the diasporic experience as represented in literary, filmic, and other cultural products. This course is offered in English by Foreign LanguagesandCulturesfaculty.Topicsvary.Coursemayberepeated with content change.
FLC 401 Language/Literature/Culture (3) Capstone course for foreign language and international studies majors. Seminar examines how the concept of national identity is reflected cross-culturally in language and literature. Topics vary. Course taught in English.
FLC 420 Foreign Languages \& Cultures Internship (1-3) Students mustcompleteaninternshipapplicationandcontractwiththeInternship provider. Theseforms mustbeapproved by the FLC advisor and the FLC department chair. To count as a 400 -level language course, students musttake 3 credits (even ifitis dividedinto differentinternships). Prerequisite: FLC major or minor.

## French (FREN)

French coursesaretaughtbythefaculty oftheDepartmentofForeign LanguagesandCultures.Allcoursesaretaughtinthetargetlanguage unlessotherwisenoted.Completion of311 orpermission ofinstructor required for all 300-and 400-level courses.

FREN 111 Elementary French I (3) Emphasizes practice in speaking, listening, writing, reading and cultural awareness. Fall (111), spring (112).

FREN 112 Elementary French II (3) Emphasizes practice in speaking, listening, writing, reading and cultural awareness. Fall (111), spring (112).

FREN 211 Intermediate French I (3) Continues practice in speaking, listening, writing, reading and cultural awareness. Fall (211), spring (212).

FREN 212 Intermediate French II (3) Continues practice in speaking, listening, writing, reading and cultural awareness. Fall (211), spring (212).
FREN 311 Conversation \& Composition (3) Includes oral-aural practice, free and directed composition and review of syntax. A prerequisite for all 300- and 400-level courses.
FREN 312 French Conversation in Context (3) Advanced oral practice and analysis of non-literary texts. Focus on pronunciation and phonetics. Prerequisite: FREN 212.
FREN 313 French Phonetics (3) This course teaches students the theoryand practiceofFrench pronunciation,includingchangingsounds and syllable structure when words are combined into phrases and sentences. It will also allow students to compare French and English phonetics. Students will learn and identify geographic and social variation in the pronunciation of French speakers.

FREN 314 Business French (3) Emphasizes speaking, writing, reading, and listening skills in business contexts as well as cross-cultural communication and comparison of French and American business cultures.

FREN 315 Intro French Literature (3) Studies French culture in literarycontext.IntroducesstudentstoFrenchliterature,literaryanalysis and discourse.

FREN 316 Quebec \& Francophone Studies (3) Introduces the literary, political, economic, and cultural traditions of Quebec and the Francophone world.

FREN 317 Intro French Theatre (3) Introduces students to major authors, periodsandconventionsofFrenchtheatre.Emphasizesconversation, composition, and reading skills and includes an introduction to literary analysis and discourse.
FREN 318 Translation (3) Introduces theory and practice of written translation in French cultural context. Includes translation of documentsfrom thefollowingfields:law, medicine, business, entertainment, industry and technology, literature. Prerequisites: Two 300-level courses or permission of instructor.
FREN 330 Independent Study (1) Course content and credit hours determined in consultation with instructor. May be repeated with contentchange. Prerequisite:French 311 orpermission of instructor. Department chair approval required.
FREN 333 Intro French/Francophone Cultures (3) Introduces French andFrancophonecultures, relatinghistoricaleventsandgeographical settings to the evolution of the language. Offered alternate years.
FREN 335 Foreign Lang Study Abroad (1) Foreign Language Study Abroad. Repeatable with content change.
FREN 415 Topics in French Literature (3) In-depth examination of French literature by author, period, and/or genre. Emphasizes advanced application of literary analysis and discourse. Topics vary. Coursemayberepeatedwith contentchange.Prerequisites:Two300level courses or permission of instructor.
FREN 434 French Civilization (3) Study of French civilization,art and culture from origin to present. Taught in French.
FREN 435 Foreign Lang Study Abroad (1) Used for study abroad course credit.
FREN 438 Adv French Language Seminar (3) Topics vary. Generally coversoutstandingFrenchauthorsandliteraryworks.Coursemaybe repeatedwithcontentchange.Prerequisites:Two300-levelcoursesor permission of instructor.

## Gender and Women's Studies (GWS)

Core,cross-listed, andaffiliatedgenderandwomen'sstudiescourses are taught by faculty members of various departments.
GWS 101 Introduction to Gender \& Women's Studies (3) Through readings, films, and class discussion, students engage in a critical examination of theories of gender and their social implications. By examiningtheirownexperiencesaswellasthewaysinwhichtheyfit, ordonotfit, intothe patterns revealedthroughgenderandwomen's studiesscholars,studentsarriveatabetterunderstandingoftherelationship of women and men to the society at large.
GWS 492 Special Topics in Gender \& Women's Studies (3) Special topics ingenderandwomen's studies not includedin regularcourse offerings.Mayconsistoflecturesanddiscussion withanemphasison research.May be repeated fora maximum ofsixcredithours. Prerequisite: GWS 101 or permission of instructor.
GWS 493 Ind Studies Gender and Women's Studies (3) Research in areasofgenderandwomen'sstudiesontopics notcoveredinexisting courses. Subject and credit earned must be approved by a faculty member, coordinatorofgenderandwomen'sstudies,anddean ofthe College of Arts and Sciences. May be repeated or a maximum of six credithours.Prerequisite:Juniorstandingorpermission ofcoordina-
tor of Gender and Women's Studies.

## Geography (GEOG)

Geography courses are taught by the faculty of the School of Education.
GEOG 120 World Regional Geography (3) Introduction to regions oftheworldsuchas Anglo-America,WesternEurope,EasternEurope and the former Soviet Union, Monsoon Asia, Africa, and others. Emphasizes themes which give each of these regions a distinctive character.
GEOG 230 Physical Geography (4) Studies and analyzes the distribution ofmajorelementsofthephysicalenvironment,includingearth inspace,earthmotions,timezones,theearth'satmosphericenvelope, topography, and mapping. Includes lab experience.
GEOG 240 Cultural Geography (3) Examines human technologies and cultural practices which give regions distinctive character. Emphasizes process of settlement and development and how the resulting cultural landscape varies through time and over space.

## Geology (GEOL)

Geology courses are taught by faculty members of the Department of Mechanical and Civil Engineering.
GEOL 130 Environmental Geology (3) A study of the relationship between humans and earth processes, such as earthquakes and volcanoes, geologic structures, plate tectonics, mountains, ocean basins,streams, glaciers, deserts,coasts,rocks,minerals, andmineral resources.

## German (GERM)

German courses are taught by the faculty of the Department of Foreign Languages and Cultures. All courses are taught in the target language unless otherwise noted. Completion of 311 or 312 is required for the major or minor. Students placing into 311 or above may automatically sign up for the upperlevel course offered their incoming semester.

GERM 111 Elementary German I (3) Emphasizes practice in speaking, listening, writing, reading, and cultural awareness. Fall (111), spring (112).
GERM 112 Elementary German II (3) Emphasizes practice in speaking, listening, writing, reading, and cultural awareness. Fall (111), spring (112).
GERM 211 Intermediate German I (3) Continues practice in speaking, listening, writing, reading, and cultural awareness. Fall (211), spring (212).
GERM 212 Intermediate German II (3) Continues practice in speaking, listening, writing, reading, and cultural awareness. Fall (211), spring (212).
GERM 311 Conversation and Composition (3) A systematic grammarreviewwhilefocusingontheprocessanddevelopmentofeffective writing skills and expression in German. Pre-requisite: PC-or higher in 212 or proficiency in 212. Fall.

GERM 312 Topics in German Studies (3) Topics vary. Course may be repeatedwith contentchange.Topics rangefromaspectsofGerman filmandtheAlps,tocrimenovelsandbiographies, tootheraspects of German cultureand society. Prerequisite:German 311 or permission of instructor.
GERM 314 Career German (3) Studies the specialized vocabulary and nature of career German.

GERM 321 Survey of German Literature to 1830 (3) Readings for broadoverviewofliterarydevelopmentinGerman-speakingEurope.
GERM 322 Survey of German Literature From 1830 to Present (3) Readings for broad overview of literary development in Ger-man-speaking Europe.
GERM 330 Independent Study (1) Content and credit hours determined in consultation with instructor. May be repeated with content change. Prerequisite: German 311 or permission of instructor. Department chair approval required.
GERM 333 Introduction to German Culture (3) Introduces the studenttotheimpactofhistorical eventson Germanart,music, cinema, and literature.

GERM 335 Foreign Lang Study Abroad (1) Used for study abroad credit.
GERM 410 Advanced German Grammar (3) Primarily for German majors and minors. Emphasizes aspects of grammar important for high school instruction in the language.
GERM 414 20th-21st Century Literature (3) In-depth examination of major German, Austrian, and Swiss writers of the 20th and 21st centuries.
GERM 433 German Civilization (3) Traces history and culture of German-speaking Europefrombeginningstothe present.Taughtin German.
GERM 435 Study Abroad (1) This is a 400-level course that is taught in the targetlanguate in a study abroad program andwhose content does not match closely any of the 400-level courses offered in the department of foreign languages and cultures. Meets the 400-level majorrequirement.Mustbeapprovedbydepartmentchairforequivalency priortostudyabroad experience.Repeatablecourse.Content changes each time course is offered. Prerequisite: GERM-311 or 312 .
GERM 438 Seminar (3) Outstanding German authors and literary works. Topics vary. Course may be repeated with content change.

## Gerontology (GT)

Gerontology courses are taught by the faculty of the Department of Law, Politics, and Society.
GT 225 Lifespan Development (3) This course will focus on the development of individuals across the lifespan. Beginning with prenatalandearlyinfancydevelopment,thecoursewill progressthrough adolescence, adulthood, and topics in death and dying.Material will include aspects of physical, cognitive, social, personality, and emotional development. This class will place an emphasis on theoretical models and experimental findings. The course adopts a discussion formatwithtextbook, primary readings, reaction papers, andaterm paper. Prerequisites: PSYC 121.
GT 401 Biology, Health, and Personality Dimensions of Aging (3) Thiscoursecoversthebasicbiological,health, andpersonalityfactors related to aging. Topics include life course changes, normal aging, nutrition, aging relateddiseases, frailty, incontinence, cognition, anxietyanddepression, dementia, and personalitychanges. Prerequisite: SOC 105, 230, or GT 225 AND permission of instructor or Director of the Gerontology Center.
GT 403 Later Life and Spirituality (3) This course covers key issues facing elders and their families in later life related to health care, death, and the spiritual needs ofelders. Topics include:dying, ethical issues, end-of-lifereviews, andtheroleofreligion overthelife course. Prerequisite: SOC 105, 230, or GT 225 AND permission of instructor or Director of the Gerontology Center.

GT 405 Institutional Care and Geriatric Assessment (3) This course coversthevariousinstitutionalsettingsservingtheneedsofelders, as wellas issues relatedtogeriatricassessment.Topics include:assisted living, residential and home-based care, community based longtermcare, designing physicalenvironmentforelders,comprehensive geriatric assessment, specific functional assessments, and geriatric assessment instruments. Prerequisite: SOC 105, 230, or GT 225 AND permission of instructor or Director of the Gerontology Center.
GT 407 Economics of Aging and Social Policies (3) With the impending retirement of the millions of Baby Boomers, understanding the economic, political, and social issues related to the elder population becomesevermoreimportanttoindividualsinsociety. Thiscourseis acomprehensiveandbalancedassessmentofeconomicissues,social policies, and their impact on everyone, old and young. Prerequisite: SOC 105, 230, or GT 225 AND permission of instructor or Director of the Gerontology Center.
GT 496 Internship (1-6) Students may elect to complete a commu-nity-based internship in a setting serving the elderly. Prerequisite: Completion of at least six modules in the Gerontology Certificate Program or permission of director of Gerontology Center.

## Greek (GRK)

Greek courses are taught by faculty members in the classical studies program.

GRK 111 Elementary Ancient Greek I (3) Presents the basic grammar, syntax and vocabulary of ancient Greek so that students can begin reading passages from ancient authors. Fall (111), spring (112) in alternate years.
GRK 112 Elementary Ancient Greek II (3) Presents the basic grammar, syntax and vocabulary of ancient Greek so that students can begin reading passages from ancient authors. Fall (111), spring (112) in alternate years.
GRK 211 Intermediate Ancient Greek (3) Continues to develop skills in the grammar, syntax and vocabulary of ancient Greek begun in Greek 111 and 112. Reading of extended passages from Herodotus, Plato, Thucydides, and the Gospel of John.
GRK 212 Introduction to Greek Prose (3) Reading of prose texts in both Attic and Hellenistic Greek. Emphasis on reading a variety of literary genres and prose styles. Students also review and enhance their knowledge of Greek grammar. Texts include the Tabula of Cebes, Lysias' On the Murder of Eratosthenes, Paul's letters, and the book of Acts.
GRK351 AtticProse(3) An advancedancient Greekcourse dedicated to the reading, analysis, and discussion of Attic prose texts of the 4th century B.C. Authors read depend on student interest and may include Aristotle, Plato, Lysias, and Isocrates.
GRK 371 New Testament Greek Exegesis (3) An advanced Greek course devoted to the reading and exegesis of the New Testament in the original language. Emphasis on gaining competence in koine Greek, skill in exegesis and literary analysis, and facility in the use of scholarly tools for New Testament study.

GRK 411 Ancient Greek Drama (3) Advanced ancient Greek course dedicated to the reading and analysis of Greek plays. Authors read dependonstudentinterest;mayinclude:Aeschylus,Sophocles,Euripides, and Aristophanes. Prerequisite: GRK-212.
GRK 421 Greek Poetry (3) An advanced ancient Greek course dedicated to reading Greek poetry. Students read a variety of Greek poets and poems, gain exposure to several different Greek dialects,
andlearnaboutpoeticmeterandscansion. Authors read dependon studentinterestandmayincludeHomer,Hesiod,Sappho,andSolon.
GRK 430 Individual Readings in Greek Literature (1) Topics and credithours must be prearranged with the instructor.Repeatableas texts and topics change.

## Health Education (HE)

Health education courses are taught by the faculty of the School of Public Health.

HE 100 Concepts of Health and Wellness (1) Examines the role of physical activity and personal fitness for healthy daily living in our society.Lecture,discussionandself-evaluationlaboratorysessionsare used to assess personal fitness. This course satisfies the health and wellness graduation requirement.
HE 111 Medical Terminology (1) Utilizes guided independent studentlearningactivitiestoteachthebasicprefixes,suffixes, androots of medical terms. Assists student in utilizing medical terminology appropriately in both written and verbal forms. Fall, spring.
HE 160 First Aid With CPR (2) Provides basic American Red Cross first aid and cardiopulmonary resuscitation certification for adult, child, and infant.
HE 360 The School Health Program (3) Examines issues related to schoolhealthservices, theenvironment,education,andtheteacher's potential role in each of these areas.

## Health Sciences (HS)

Healthsciencescoursesaretaughtbythefaculty oftheDuniganFamily School of Nursing. Courses are open to all University students.
HS 101 Adult Health and Wellness (1) Focuses on a holistic approach toahealthylifestyle.Emphasizesassessment,management, andindividualresponsibilityinpromoting personalhealth.Meetsthegeneral education Health and Wellness requirement. Fall, spring.
HS 200 Humanity-Sanity and Insanity:Media Impact (3) This course willexamineandevaluatemassmedia portrayal ofmentalhealthand mental illness. Class activities are coordinated to stimulate thought and discussion on a variety of viewpoints. Students will examine the historicalimpactmassmediahasonpublicopinions relatedtomental illnessandinfluencesonthetreatmentofmentalillness.Variationsin massmediaportrayalacrosscultureswillbeexaminedthroughgroup discussions.Students willevaluatepersonopinions relatedtomental healthandillnessandchangesinperceptionsasthecourseprogresses.
HS 205 Pharmacology (3) Survey course provides afoundation inthe basic principles of pharmacology with emphasis on knowledge and interventionsneededtomaximizetherapeuticeffectsand preventor minimize adverse effects ofdrugs. Builds onthe knowledge ofphysiology, chemistry, and psychologyto understand the action ofdrugs in the human body. Prototype drugs used to teach basic principles of select drug classifications and drug action on biologic systems. Placement:Sophomorelevel.Prerequisites:CHEM 108orequivalent; EXSS 112, 113.

## Health Services Administration (HSA)

Healthservicesadministrationcoursesaretaughtbythefaculty ofthe School of Public Health.
HSA 405 Health Care Systems: Issues and Trends (3) Overview of the health care system. Reviews the history and current status of various segments ofhealth care. Includes ananalysis oftheimpact of socioeconomic, political, and current health care issues and trends.
HSA 406 Jurisprudence and Ethics in Health Care (3) Emphasizes thelegalandethical processesandtheirapplicationtothehealthcare
organization,administrator,staff,employees,and patients.Includes ethicaldimensionsofthedecision-makingprocessandcurrentethical issues in health care.

HSA 414 Health Care Management Theory and Human Resources (3)Managementtheoryand practiceasappliedbymanagersofhealth services.Emphasizesanalysis ofthemanager's roles,interactionswith people,theorganization, andtheenvironment.Specialemphasison human resource issues.
HSA 420 Health Care Planning and Marketing (3) Integrates longrange goal planning with dimensions of marketing for health care services.Concepts,techniques, andtheoriesusedintheplanningand management of marketing in the health care industry.
HSA 467 Statistics Appraisal and Evaluation (3) Focuses on the analysis ofdatacommontohealth care.Includesdatadescription,elementsofprobability,distributionofrandomvariables,estimationand confidence intervals, binomial andnormaldistributions, hypothesis testing, contingency tables, regression analysis, and ANOVA.
HSA 490 Decision Making in Health Care (3) Examines decision making in health services administration by extensive use of case studies. Integrates material from other HSA courses into the study of decisions facing all types of health care organizations.
HSA 495 Independent Study (1) Independent research in health care managementconductedunderfacultysupervision.Prerequisite:Permission of the instructor.
HSA 498 Internship in Health Services Administration (1) A structuredassignmentwhichallowsstudenttogainpractical experiencein ahealth caremanagement position relatingtoanarea of careerinterest.Studentisdirected bytheinternshipdirectorandsupervisedbya memberofthecooperatingorganization. Prerequisite:Permission of health services administration program director.
HSA 499 Special Topics in Health Services Administration (1) Lecturesanddiscussion oftopics notcoveredinregularcourseofferings. Providesgreaterdepthtotopics ofspecialinterestorexplores rapidly changing areas in health services administration.

## History (HIST)

History courses are taught by the faculty of the Department of History.
HIST 111 World History to 1500 (3) Examines major political, religious, and cultural developments in Asia, Africa, the Mediterranean basin, Europe, and the Americas from ca. 3000 BCE to 1500 CE. Throughacombination oflectures,classdiscussion,andclosereading of primarysources,coursefocusesonhow geography, climate,social structures, and cultural values combine to shape political systems, religion, and gender relations in diverse societies.
HIST 112 World History Since 1500 (3) Guides students through the keyforces shaping the modern world, and adopts a broad global approach tothe period, paying appropriate attention to Asia, Africa, and the Middle East as well as to Europe and the Americas. Includes thestrugglefordemocracy,theemergenceofcapitalismandsocialism, theexperienceofimperialismandracism, andrelateddevelopmentsin science, culture, and gender relations.
HIST 141 American History to 1865 (3) Surveys political, economic, social, and military developments in the United States from the time of exploration and the founding of the colonies to the end of the Civil War. Pays particular attention to slavery, the frontier, the rise of democracy, the roots of secession, and issues of class, ethnicity, and gender.
HIST 142 American History Since 1865 (3) Surveys political, social, economic, and cultural developments in the United States from the
end of the Civil War to the present day. Special attention to the impact of industrialization, the crisis of the Great Depression, race relations, gender, and foreign policy.
HIST 290 Approaches to History (3) Examines the evolution of the fieldofhistory.Exploresquestionsconcerningthenatureofthedisciplineandstudiestheprinciplesofhistoricalmethodology.Focuseson questionsofhowhistoriansgatherandevaluateevidenceandconsiders directions the discipline is currently taking. Intended for history freshmen and other beginning history majors.

HIST 311 The Greeks and the East (3) Examines the historical relationshipbetweentheAncientGreeksandtheircontemporariesinthe Near East. Prerequisite: Sophomore standing or HIST 111 or 312 or permission of instructor.
HIST 312 The Evolution of Rome (3) Examines the history of Rome from the early republic to the end of the imperial era. Focuses on internal sources of stability and Rome's success in integrating the empire. Prerequisite: Sophomore standing or HIST 111 or 311 or permission of instructor.
HIST 313 Medieval Europe 410-1350 (3) Introduces students to the history and culture of Western Europe and the Mediterranean between 410 and ca. 1350. Traces the collapse of the western Roman Empire in the mid 5th century, the evolution of civilizations of Byzantium, Islam and western Christendom, and the fusion of Roman, Christian, and Germanic elements that create medieval Europe. Prerequisite: Sophomore standing or HIST 111 or 312 or permission of instructor.
HIST 314 Renaissance and Reformations: Europe 1350-1648 (3) Examinesunderlying causesofnewmodes ofartisticandintellectual expression, expansionintotheNewWorld,andtheaggressivepursuit of scientific knowledge in Europe during this period. Also explores whythe promise oftheRenaissanceand "liberty" ofthe Reformation co-existed with a Europe racked by vicious religious wars, peasant revolts, and "other" (e.g., witches, heretics, homosexuals, Jews). Prerequisite: Sophomore standing or HIST 111 or 313 or permission of instructor.
HIST 316 Europe in the 18th Century 1774-1850 (3) Examines the economic, social, political and cultural history of Europe in the eighteenthcentury, with particularemphasisoneconomicandsocial changes in both town and country. Considers the role such changes playedintheorigins, courseandcontinent-wideimpactoftheFrench Revolution. Prerequisite: HIST 112, HIST 314 or permission of instructor.
HIST 317 Napolean to Bismarck: Europe 1800-1890 (3) Explores the impact of the industrial revolution on urban and rural life in Europe, paying particular attention to changes in the distribution of wealth thatoccurred during this period and the political andcultural responses to those changes. Prerequisite: HIST 112 or permission of instructor.
HIST 318 The First World War (3) Examines the causes, course, and consequences of the First World War. Traces the roots of the war to the European power politics of the 1870s, and follows the consequences up to the rise of fascism. In studying the war itself, focuses ontheexperienceofindividualsinvolved, womenandmen,combat-antsandnon-combatants.Includesextensivediscussion of painting, poetry, sculpture, photography, and the novel. Prerequisite:Sophomore standing or HIST 112 or 317 or 381 or permission of instructor.
HIST 319 The Second World War (3) Examines the origins, courses, and results of the Second World War, with focus on the experience of the individual caught upin one of the mosthorrific experiences of the 20th century. Studies the rise of Nazism and fascism throughout Europe as the key to understanding the origins of the war. Includes
discussion ofpainting, poetry, sculpture,photography, andthenovel. Prerequisite: Sophomore standing or HIST 112 or 318 or permission of instructor.
HIST 320 Women's Lives in the Pre-Modern World (3) Studies the histories ofwomenindiversesocieties priorto 1800includingparts of western Europe, Asia, the Americas, and the Middle East. Pays close attention to gender relations, the role of religion in determining the statusandtreatment of women, how theeconomic space (oritslack) forwomenshapestheirexperiencesandhowwomenareabletowield influence, power, or authority in public and private spheres. Prerequisite: Sophomore standing, GWS 101 or permission of instructor. This course counts toward the Gender and Women's Studies Minor.

HIST 321 Islam and the West in the Middle Ages (3) Examines relationships between Islamic and Christian civilizations from the 7th through the 14th centuries from the perspectives of the Islamic Empires.Explorestheevolution of Islamic religion, political, cultural, and scientific exchanges and their long-term impacton both societies. Pays special attention to the rise and collapse of various Muslim empiresandhowtheCrusadescreatednotonlyconflict,butopportu-nitiesfortradeandintellectualexchangesaswell.Prerequisite:Sophomore standing or HIST 111 or 313 or permission of the instructor.
HIST 322 The French Revolution: Origins, Course, and Impact (3) Examines the economic, social, political, and cultural history of Europe in the 18th century, with particular emphasis on economic andsocialchangesinbothtownand country.Considerstherolesuch changes played in the origins, course, and continent-wide impact of the French Revolution. Prerequisite: HIST 112 or 314 or permission of instructor.
HIST 323 The United States and the Middle East, 1919-Present (3) Examines the legacy of Wilson's policy for the Middle East and how itshapedUnitedStates decolonization policyfollowingWorld WarlI. Considerstheemergenceofindependentstates, includingIsrael, and theconflictsbetweennationsandnon-stateactorssince 1945.Studies the United States' role in the Middle East and considers how this has helpedshapethe currentstate of affairs in the area. Prerequisite: Sophomore standing.
HIST 324 The Emergence of Modern China and Japan Since 1600 (3) Examinesthedistincthistoricaldevelopmentsandmodernization of both China and Japan as well as the intersection of their cultures, economies, and political institutions.Outlinesthedevelopmentand eventualdeclineoftheQingdynastyandtheTokugawashogunatein the face of western imperialism. Traces the divergent paths taken by the two countries in their efforts to challenge Western domination, assertnationalindependence,andestablishregionalstrength.Prerequisite: Sophomore standing.
HIST 340 Crime, Punishment, and the Law in Early America 16071861 (3) Introduces students to the legal history of early America from the colonial period until 1861. Analyzes crime and punishment, the unwritten law, intersections of the law and economics, and laws affecting marginalized peoples. Pays particular attention to court cases as indicators of larger legal trends. Prerequisite: Sophomore standing or HIST 141 or 342 or permission of instructor.

HIST 343 The Civil War and Reconstruction (3) Studies the events leading to the Civil War. Examines the economic, political, social, and military aspects of the war and considers the post-war period of Reconstruction. Prerequisite: Sophomore standing or HIST 141 or 142 or 341 or permission of instructor.
HIST 344 The American Revolution (3) Examines the social, cultural, political, andmilitarydevelopmentsinAmerica's revolutionary period from 1754 through the ratification of the Constitution in the
late 1780 s. Particular emphasis will be placed upon the causes and consequences oftheAmericanRevolution, including theideological origins of the conflict. Prerequisite: Sophomore standing or HIST 141 or 340 or permission of instructor.
HIST 345 United States Foreign Policy Since 1776 (3) Broad understanding of the main developments in American diplomatic history. StudentsengageseveralmajorthemesinUnitedStatesforeignpolicy andlearnhowtheseinteractbystudyingspecificeventsthroughout the history of America's involvement in the world. Discusses United Statesinteractionwithnationsoneverycontinentandthroughoutthe centuries, looking for inconsistencies in these interactions and their impactoncurrentglobalissues.Prerequisite:Sophomorestandingor HIST 141 or 142.
HIST 348 The Great Crash and Great Depression: U.S., 1919-1941 (3) Examinesthecauses oftheGreatDepression,comparesitto previouseconomiccrises,comparestheresponsesofHooverandRoosevelt tothedepression, anddiscussestheorigins, development, andimpact of the New Deal. Prerequisite: Sophomore standing or HIST 142 or 319 or permission of instructor.
HIST 349 Cold War America: 1945-1990 (3) The Cold War shaped American society, politics, foreign policy, economics, and culture in profound ways that must reviewed in the context of the American struggle with the Soviet Union. Important international conflicts such as the Korean War and the Vietnam War will be examined. Significanteventssuchasthecivilrightsandwomen's rightsmovements will beinvestigatedalong with culturaland politicaltransformations that shaped the period. Prerequisite: Sophomore standing or HIST 142 or 348 or permission of instructor.
HIST 351 Atlantic World Since 1492 (3) Examines how the peoples of Europe, Africa, North America, and South America forged a unique Atlantic community between 1492 and 1800 . Pays special attention to the exploration and colonization of the Americas, including the developmentofslavesystemsandimperialgovernance.Prerequisite: Sophomore standing or HIST 112 or 354 or permission of instructor.
HIST 354 History of the Caribbean to 1900 (3) Explores the development of Caribbean societies from the late eighteenth century to the late nineteenth century. Analyzes the gradual disintegration of the plantation system as a result of internal and external forces.Uses a comparative approach to study internal migrations, creolization, plantation economies, natural disasters, crime, and emancipation. Prerequisite: Sophomore standing or HIST 112 or 351 or permission of instructor.
HIST 380 Topics in History (3) Explores specialized topics in history in a lecture-discussionformat. Repeatable course. Contentchanges each time course is offered. Prerequisite: Sophomore standing or permission of instructor.
HIST 381 Modern Britain: Challenge, Continuity, and Change, 1815 to Present (3) Studies British politics and society during a period of remarkablechange, as Britainacquiredthebiggestempireinhuman history and then lost it, while progressing from being a country that fought wars with its European neighbors to one that was close to the heart of the European Union. Covers religion, gender, politics, race, sport, art, and literature. Prerequisites:Sophomorestanding or HIST 112 or 317 or permission of instructor.
HIST 383 Modern Scotland: Politics, Culture, and Identity, 1707 Present(3)Studies the development ofScotland over 300 years from thepoliticalunionwithEngland,throughtheEnlightenmentandthe Industrial Revolution, to the two world wars and modern political devolution. Includesstudy ofculture, religion, society, andliterature. Prerequisite: Sophomore standing or HIST 112 or 381 or permission of instructor.

HIST 385 Ireland and the Irish Diaspora (3) Studies the history of Ireland and Irish emigrant communities from the Middle Ages to the present day. Focus primarily on the years since 1700 and pays particularattentiontopoliticalandsocialhistory, includingthestrugglefor independence,emigrationanditscauses, andthechangingfortunes oflrishcommunitiesoverseas,especiallyinNorthAmerica.Prerequisite: HIST 112 or permission of instructor.

HIST 418 War, Politics, and Gender (3) Examines various aspects of warfare in the Middle Ages, including weapons and tactics, the circumstancesprecipitatingorpreventingwar,therolesofthechurch in shaping the intellectual and ethical framework of warfare, and the involvement of women in war as both armed and unarmed participants. Prerequisite: HIST 313 or 321 or permission of instructor. This course also counts toward the Gender and Women's Studies Minor.

HIST 429 Voices from the Land: Rural Life Europe, and North America, 1780-1900 (3) Comparative study of select rural communitiesduringtheageofindustrialization.Specialattentiontothethemes of social class, folk culture, gender relations and rural politicization, especiallyinthecontextofstrugglesforlandreformstimulatedbythe radical politics oftheage.Incorporatesoriginalaccounts oflifeonthe land from European and American sources. Prerequisite:HIST 111 or 112 or 141 or 142 or 317 or 342 ; consent of instructor.
HIST 438 War, Death, and Memory 1914-1939 (3) Investigates the impact of the First World War's enormous death toll on European society, and in particular its impact on Christianity. Examines how societies responded to death both formally and informally. Studies the evolution, meaning, and impact of war memorials, as national, civic, and individual loci for grieving. Prerequisite: HIST 112 or 142 or 317 or 318.

HIST 450 The Decolonization of Africa, 1919-Present (3) Examines the various paths that African peoples have taken to attain independence from European colonial powers. Takes an in-depth look at the writings, political activities, and violent struggles of several African societies as theychallengedtheircolonial masters.Assessestherelativesuccessorfailureoftheseindependencemovements.Prerequisite: Junior standing or HIST 112 or permission of instructor.
HIST 480 Topics in History (3) Explores specialized topics in history, usingtheseminarformat.Repeatablecourse.Contentchangeseach time course is offered. Prerequisite: Junior standing, completion of three history courses, and permission of department chair.
HIST 490 Senior Seminar in History (3) Enables history majors to applytheprinciplesofhistoricalmethodologylearnedinHistory290, in the preparation of a major research paper. Required for history majors. Prerequisite: Senior standing or permission of instructor.
HIST 491 Independent Study in History (1) Research and/or focused reading for history majors and minors on topics not sufficiently coveredinthe regularcourseofferings.Mayberepeatedforamaximum of six hours. Prerequisites: Junior standing; permission of instructor.
HIST 492 History Internship (1) Supervised field experience in agencies such as archives, historic preservation agencies, historical museums, or similar locations of direct relevance to a history major. Prerequisites:Sophomorestanding;permissionofdepartmentinternship coordinator.
HIST H378 Britain and the Middle East to 1922 (3) Explores the role played by Britain in shaping the modern Middle East by focusing on British attempts to solve the "Eastern Question" - namely, deciding the fate of the Ottoman Empire. Examines the extent to which this effort provoked the rise of Arab nationalism and Islamic fundamentalism. Prerequisite: HIST 112 or permission of instructor.
HIST H379 Africa and British Imperialism, 1815-1919 (3) Explores
the role Britain played in shaping modern Africa and the reactions of Africans to this foreign intervention. Prerequisite: HIST 112 or permission of instructor.

## Honors (HON)

Honors courses are taught by faculty members from allthe University's colleges and schools.
HON 110 Special Topics in Honors (1) Varied topics of special interest.Mayberepeated.Prerequisite:MustbeenrolledintheUniversity Honors Program. Junior or senior standing required for enrollment in HON 310, 410.
HON 210 Special Topics in Honors (1) Varied topics of special interest.Mayberepeated.Prerequisite:MustbeenrolledintheUniversity Honors Program. Junior or senior standing required for enrollment in HON 310, 410.
HON 211 Interdisciplinary Perspectives in Honors (1) Honors students will examine a single topic from various interdisciplinary perspectives. Instructors from various fields will deliver lectures on the central topic of the course, but within the framework of their specificfield,therebyintegratinginterdisciplinaryperspectivesona singular topic. Honors students enrolled in Honors 211 are required to simultaneously be enrolled in one of the various Honors Interdisciplinary Perspectives courses (HON 212-218). Honors students are encouraged to take this course during their sophomore year.
HON 212 Honors Interdisciplinary Perspectives in Imaginative Expressions(3) Honors students willengage with literaryandimaginative expressions of the human condition within historical and cultural contexts.Students will beencouragedtocritically evaluateand appreciatethevalue,meaning,andsignificanceofliteraryworks.This course will emphasize responding to works in writing that reflects clear and critical thinking. Although the central topic of the course might vary, the broad approach and goals of this course described herein will remain constant. Honors students enrolled in HON 212 are required to simultaneously be enrolled in HON 211. Honors studentsareencouragedtotakethiscourseduringtheirsophomoreyear.
HON 214 Honors Interdisciplinary Perspectives in Fundamental Beliefs (3) Honors students will engage with material related to critically considering fundamental beliefs about human identity, core values, and humankind's place in the world. Although the central topic of the course might vary, the broad approach and goals of this course described herein will remain constant. Honors students enrolled in HON 214 are required to simultaneously be enrolled in HON211.Honors studentsareencouraged to takethis courseduring their sophomore year.
HON 218Honors Interdisciplinary Perspectives in Scientific Literacy
(3) Honors students will learn of the fundamental facts, laws, and theories ofascientific disciplineanddevelopanabilitytoreasonand solve problems using scientific concepts. Students will learn about various interdisciplinary connections of the scientific discipline to society (past, present, and future). Although the central topic of the course might vary, the broad approach and goals of this course described herein will remain constant. Honors students enrolled in HON 218 are required to simultaneously be enrolled in HON 211. Honors students are encouraged to take this course during their sophomore year.
HON 310 Special Topics in Honors (1) Varied topics of special interest.Mayberepeated.Prerequisite:MustbeenrolledintheUniversity Honors Program. Junior or senior standing required for enrollment in HON 310, 410.
HON 410 Special Topics in Honors (0) Varied topics of special interest.Mayberepeated.Prerequisite:MustbeenrolledintheUniversity

Honors Program. Junior or senior standing required for enrollment in HON 310, 410.

## Interdisciplinary (ID)

Interdisciplinary courses provide instruction in topics requiring understanding from the perspectives of several disciplines.
ID 105 Science and Math in the Environment (2) This hands-on, interdisciplinary course is designed to introduce students to skills in biology, chemistry, physics, and math and their applications in the environment. Students will explore conservation issues, pollution problems, and how alternative energy works. Students will plan a project to make a real difference in the local environment and write afinal paperbasedonin-depthresearchonanenvironmentalscience topic. Inaddition, there will belaboratoryactivities, discussions, and problem-solving exercises. The courseoffersagoodintroductionto study in any science or math-related major.

ID 106 Excelling in Science and Mathematics (1) ID 106 is designed tohelpstudentslearnthestudyandtesttakingskillsneededtoexcel in a college math or science major. Topics for this course will include: effectivecommunication,activereading, notetaking,learningstyles, career services and research opportunities in math and science.
ID 111 Structures and Materials of World Cultures (3) An overview of structural behavior and material science as related to structural types and building materials of historical interest. Three hours lecture. Prerequisite: MATH 105 or higher. Spring.
ID 150 The American Corporation (3) Examines the constitution and functions of American corporations and how they interact in a global society. Studies the corporation as an instrument in the creative process of innovation throughout the world. Social and ethical responsibilitiesofbusinessentitiesandresponsibilityofsocietytoward corporations explored in relation to the role of the corporation as a source of national prosperity and wealth. Involves formal readings aswellas anexperiential component in which students interact with participating corporate executives.
ID 200 International Cinema (3) Overview of international (non-American) cinema from the 1890s to the present. Focuses on the masterpieces of the art form. Studies the major filmmakers and movements including German Expressionism, Soviet Realism, Parisian Avantgarde, Renoir, Italian Neo-realism, Bunuel, Kurosawa Bergman, Fellini, French New Wave and others.
ID 201 Interdisciplinary MCAT Prep (0) ID 201 includes student direction and involvement in preparation for MCAT exam. Involves participationinstudent-leddiscussion/learningsessions.Sophomore or junior standing. Repeatable course: a max of 5 credit hours may beearnedforrevieworpreparatorycoursesinanydiscipline. Content changes each time course is offered. Students receive a pass or fail grade based on their attendance and participation in at least $75 \%$ of the course. Fall and Spring.
ID 205 American Cinema (3) Overview of American cinema from the 1890stothe present. Focuses onthemasterpiecesoftheartform. Studies the major filmmakers including Edison, Porter, Griffith, Seastrom, von Sternberg, Flaherty, Ford, Hitchcock, Welles, Curtiz, Lean, Kazan, Ritt, Coppola, Scorsese, Spielberg, Beresford and others.
ID 220 The Holocaust Revisited (3) Explores various responses to the Holocaust.Examines historical insights and contemporary perspectives. Focus of discussion on works by Elie Wiesel, Phillip Haillie, Primo Levi, Ethy Hillesum, Richard Rubenstein and John Roth along with selected films.
ID 235 Sacred Architecture and Its Liturgy (3) Introduction to the major art forms which have developed in British Cathedrals: archi-
tecture,choralandorganliterature,hymnody, liturgy,sculpture,and stained glass. Includes a two-week research trip to UE's Harlaxton College in England with visits to numerous cathedrals.
ID 250 Myths of the Greeks (3) Centers on the stories of the Greeks that have survived through the art, architecture, and literature of ancient times.

ID 255 Women Mystery Writers and the Rise of Feminism (3) Concerning women's mystery and detective fiction and the rise of feminism in the western world since 1920. Focuses on the writing of seven authors: Agatha Christie, Dorothy L. Sayers, Ngaio Marsh, P.D. James, Sue Grafton, Sara Paretsky, Patricia Cornwell. At east one mystery novelfromeachauthorincludedinthereadings.Alsofollows theriseofthewomen's movementintheWestduringthe pasteighty yearsandspecificallyexaminesthechangingimageofwesternwomen as portrayed in popular media.
ID 325 Alexander the Great and the Hellenistic World (3) Interdisciplinary study of the rise of the Macedonian state in the fourth century BCE, focuses first on the careers of Philip II and Alexander the Great, then examines the Hellenistic kingdoms created by their successors in Greece, the Near East and Egypt. Besides historical eventsandmaterialculture,surveysHellenisticliterature,philosophy and science. Prerequisite: HIST 111 or 311 or 312 or permission of instructor. Alternate years
ID 356 Functional Anatomy and Biomechanics (3) The study of humanmovementutilizing principlesofanatomy, physiology,physics andotherrelatedsciences.Emphasizesbasicbiomechanicsandmusculoskeletalstructureandfunction.Studentslearntoanalyzehuman motion anatomically, kinematically and kinetically. Spring.
ID 380 Applied Product and Process Development (3) Provides an immersion intoanactual productorprocess developmentcompetition in the context of a two week intensive course. Students from at least two disciplines will participate in two or more interdisciplinary teams that will pursue the development of a new product or process for a regional client. Theteams will compete to develop the product or process that best meets the client's needs. The selected winning team of the competition may be eligible for a prize provided by the client.
ID433 Human Growth and Development(3) Presentstypical human developmentfromconceptiontodeathincludingfunctionalchanges inpostureandmovement.Presentsprocessesofgrowth,maturation, adaptation, motorcontrolandmotorlearning.Discusses concepts of critical period, health risk, physiologic reserve and senescence. The relationshipofphysical,cognitiveandsocialtheoriesofhumandevel-opmentandage-relatedsystemchangesgiven.Viewsmotorbehavior acrosslifespanwithinasocialandpsychologicalcontext.Prerequisite: Sophomore standing. Fall.
ID 480 Origins and Effects of Modern Technology (3) Studies the development, the current place in society and the observed and potential benefits and threats of several 20th century technological innovations. Involves individual presentations and seminar discussions. Open to all majors in the University. Satisfies senior seminar requirement.Prerequisites:Completion ofatleastonesciencecourse; senior standing.
ID 350H Honors Seminar/Special Topics (3) A thoughtful exploration ofaninterdisciplinarytopicwithreadingsandstudentparticipation and presentations. May be repeated.
ID H290 Britain and Europe: Special Topics (1) A research-based exploration of a topic in the development of British culture: e.g.,The Age of Chivalry, Causes of World War I, From Byrd to the Beatles. Close working relationship with a British faculty mentor in a small class environment.

ID H365 Issues in Contemporary Britain (3) This course, taught at Harlaxton College, explores issues in contemporary Britain.

## Latin (LATN)

Latin courses are taught by the faculty of the Department of Archaeology and Art History.
LATN 111 Elementary Latin I (3) Introduction to the basic elements of Latin grammar and syntax. Emphasis on reading and simple composition.

LATN 112 Elementary Latin II (3) Introduction to the basic elements of Latin grammar and syntax. Emphasis on reading and simple composition.
LATN 211 Intermediate Latin I (3) Develops the understanding of advanceLatinsyntaxandemphasizes reading ofextendedpassages from selected Latin prose authors. Poetry is introduced in 212.
LATN 212 Intermediate Latin II (3) Develops understanding of advancedLatinsyntaxandemphasizes readingofextendedpassages from selected Latin prose authors. Poetry is introduced in 212.

LATN 315 Latin Prose Historians: Caesar and Sallust (3) Reading of selections from Caesar's Gallic War and Civil War and Sallust's War with Catiline or Jugurthine War. Develops students' command of Latin vocabulary and understanding of advanced Latin syntax and grammar.Studentswillconsidercommonhistoricalthemesand approaches employed by the authors. Prerequisite: LATN 212 or permission of the instructor.
LATN 316 Cicero (3) Reading of unedited Latin selections from Cicero's Philippics and De Natura Deorum. Beyond continuing development of vocabulary skills, introduces the formal study of rhetoricusingCicero'sorationsandphilosophicalworks.Prerequisite: LATN 212 or permission of the instructor.
LATN 321 Vergil (3) Reading of selections from Books 1, 2, 4, and 6 of Vergil's Aeneid. Develops understanding of Latin poetic form, teachesprinciples ofscansionandreinforcesknowledgeofimportant literary devices in Latin. Prerequisite: LATN 212 or permission of the instructor.
LATN 329 Medieval Latin (3) Reading of selected medieval Latin texts from the fourth century CE up to the Renaissance. Introduces studentstothechanges in Latin grammarandvocabulary occurring in Late Antiquity and the Middle Ages. Prerequisite: LATN 212 or permission of the instructor.
LATN 330 Individual Readings in Latin Literature (1) Topics and credithoursmustbeprearrangedwithinstructor.Repeatableastexts and authors change.

## Law (LAW)

Law courses aretaughtby the faculty of the Department of Accounting and Business Administration. All courses are subject to the leveling policy and prerequisite requirements of the Schroeder Family School ofBusinessAdministration.Seethe"SchroederFamilySchool of Business Administration" section of this catalog for the complete leveling policy.

LAW 201 Legal Environment of Business (3) Introduces principles of lawandmechanics ofthelegalsystem. Providesabroadintroduction tolegalconceptsandstatutesthataffectbusinessesandmanagerial decision making.
LAW 302 Business Law (3) In-depth coverage of the concepts of partnership, agency, corporations, commercial paper, sales and secured transactions. Prerequisite: Grade of C- or better in LAW 201.

## Legal Studies (LS)

Legal studies courses are taught by the faculty of the Department of Law, Politics, and Society.
LS 125 Law in Society (3) Overview of major principles and functioningofourlegalsystem.Introducesstudentstojurisprudentialanalysis andtotheroleofprofessionalswithinthejusticesystem.Legalaspects ofcurrenttopics discussedtoassiststudentsinacquiringanappreciation for the dynamic role law plays in our changing society.
LS 300 Legal Research (3) Examines the law library, surveys the various referencesourcesavailabletolawyersindeterminingapplicable law, and studies the processes of legal research and writing of memoranda presenting results of that legal research. Includes numerous practice problems requiringlegalresearchandmemorandawriting, utilizingstatues, casereports,encyclopedias,treatises,computerized legal research systems,andotherlegal research courses. Prerequisite: LS 125.
LS 301 Legal Drafting (3) Uses basic skills learned in Legal Studies 300, in which accent was on learning the law library and how to use the various finding tools in uncovering the law. Advanced legal research and writing deals primarily with what to do once one finds the law, the techniques of reading and analyzing case law, and the fundamentalsoflegal writingincludingtheuseofforms,memoranda and briefs. Prerequisite: LS 300.
LS 310 Real Estate (3) Covers basic laws relating to real property and commontypes of real estate transactions and conveyances. Studies variousinstrumentssuchasdeeds, contracts,leasesanddeedsoftrust withemphasisonhowtheseinstrumentsaredrafted.Studyactivities includeresearch projects relatingtothesubjectmatterandpracticein retrieving and recording information. Prerequisite: LS 125.
LS 320 Evidence, Litigation and Trial Practice (3) Includes analysis and discussion of common types of litigation, promises of litigation, sources of law, the court systems, attorneys, types of lawsuits, usual defenses. Examines Indiana civil procedures, discovery procedures,courtprocedures,trial, post-trialmotionprocedures,appeal, enforcement of judgment and various types of litigation. Particular attention giventotheroleoftheparalegal inassistingtheattorney in these matters. Prerequisite: LS 125.

LS 340 Federal Taxation (3) Studies current federal income tax law concepts of income and deductions for all entities. Prerequisite: LS 125. Same as ACCT 329.

LS 343 Criminal Law (3) Studies both substantive and procedural criminal law including specific topics in each. Prerequisite: LS 125. Same as CJ 342.

LS 345 Constitutional Law: the American Constitution (3) Reviews judicial decisions and interpretationswhich have contributed to the growth and development of the United States Constitution in such areasasthefederal system, intergovernmentalrelations, presidential powers, government functions and civil rights. Prerequisite:LS 125. Same as PSCI 345.

LS 350 Business Organization (3) Studies the legal organization of business entities. Emphasis on the role of the lawyer and the legal assistantintheformation ofvariousbusinessorganizations. Includes a survey ofthefundamental principles oflawapplicabletoeachtype ofbusiness organization and preparation of the related documents. Prerequisite: LS 125.
LS 370 Family Law (3) Acquaints the legal studies student with the legal problems involved inthearea ofdomestic relations. Covers the legal problems involved in separation, divorce, child custody, adoptionand nonsupport.Studentsdraft pleadings indomesticrelations cases as well as study the law regarding the particular area in which they are working. Prerequisite: LS 125.

LS 380 Administrative Law (3) Overview of the functions and procedures offederaladministrativeagencies, includinganalysis oftheir underlying statutory authority as embodied in the Administrative Procedure Act and the subsequent case law development of this authority. Topics include the rule-making function, administrative adjudicationanddueprocess,judicialreviewofadministrativeaction, useandcontrolofdiscretionintheadministrative processanddisclosure of information by administrative agencies. Prerequisite:LS 125.
LS 420 Women and Law (3) Introduces students to legal issues that have had a profound impact on the legal standing and rights of women. Examines the historical context that created the present legal status of women in the United States. Prerequisite: LS 125 or permission of instructor.
LS 480 Special Topics in Law (3) Covers selected topics in more depthandexplorescurrentlaw-relatedissues.Prerequisite:LS 125 or permission of instructor.
LS 491 Internship I (3) The internship requirement for the legal studiesprogramcombinesthestudent'sacademictrainingwith practical experiences within a law firm, corporation, bank or governmental agency. Prerequisite: Senior standing.
LS 492 Internship II (3) The internship requirement for the legal studies programcombinesthestudent'sacademictraining with practical experiences withinalawfirm, corporation, bankorgovernmental agency. Prerequisite: Senior standing.
LS497 Contemporary Legal Issues (3) Considers contemporary legal issues and their impact on our culture. Research and writing about those issues required. Prerequisite: Senior standing, completion of legalstudiescorerequirementsorpermissionoftheinstructor.Senior seminar course for legal studies majors.

## Logistics and Supply Chain Management (LSCM)

Logistics and supply chain management courses are taught by the faculty of the Department of Accounting and Business Administration. All courses are subject to the leveling policy and prerequisite requirementsoftheSchroederFamilySchoolofBusinessAdministration. See the "Schroeder Family School of Business Administration" section of this catalog for the complete leveling policy.
LSCM 315 Introduction to Logistics and Supply Chain Management (3) An introduction to the analysis and design of domestic and internationallogisticssystemsandsupplychainmanagement.Topics include transportation, warehousing, inventory control, materials handling and packaging, plant and warehouse location decisions, sourcing, and supply chain performance and financial analysis. Additionalemphasisisplacedonconceptsand practicesthatprovide firmswithaglobalcompetitive advantage.Prerequisite:Satisfaction of leveling policy. Same course as MGT 455.
LSCM 320 Advanced Logistics Management (3) Provides in-depth knowledgeontheapplication oflogisticsservicesfromoriginal sourcingthroughdeliveryoffinished productsinthesupplychain.Focuses onfundamentallogisticsfunctionssuchaspurchasing, procurement, forecasting, inventorycontrol,schedulingand distributionchannels. Prerequisite: Grade of C- or better in LSCM 315.
LSCM 330 Supply Chain Management Solutions with SAP (3) Provide knowledge and experiences working with the SAP ERP system. Specialattentionisaffordedtointerdependenciesbetweenlogistical and back office software functions such as finance, controlling, and human resources. Students will learn the SAP ERP system, work through key tasks in all major modules, and most importantly, understandtheunderlyingbusinessprocessesimpactingsupplychain management. Prerequisite: Grade of C- or better in LSCM 315.
LSCM 350 Humanitarian Logistics (3) This course provides an
understandingofthekeyelementsofhumanitarianlogistics.Students will learn key information on humanitarian aid, current implications oflogisticsandsupplychainmanagement,andhowtoemployfuture applicationsandinnovationtohumanitarianaid programs.Prerequisite: Grade of C- or better in LSCM 315.
LSCM 360 Global Logistics and Supply Chain Management (3) Addresseslogisticsandsupplychainmanagementintheglobalenvironmentwhichinclude:globalprocurementandsourcing,methods of entry, international contracts, terms of trade, terms of payout, internationalmodes, internationalinsurance, managing globaltransactionrisks, anddevelopingstrategicadvantagesintheglobalsupply chain. The course will also address environmental, sustainable, and cultural decisions that affect logistics and supply chain processes. Prerequisite: Grade of C- or better in LSCM 315.
LSCM 370 E-Logistics (3) Describes the role of electronics, informationtechnologies, andinformationsystemsincollaborativesupply chain relationships. Emphasis is given on the tools and skills for understandinghowtomanagetheelectronicenvironmentoflogistics and supply chain management. Prerequisite:Grade ofC- or better in LSCM 315.

LSCM 380 Special Topics in Supply Chain Management (3) Covers topics not included in other courses, gives greater depth in certain areasandexplorescurrentsupplychainmanagementtopics.Repeatablecourse.Contentchangeseachtimecourseisoffered.Prerequisite: Grade of C- or better in LSCM 315.

LSCM 390 Contemporary Supply Chain Issues (3) Provides students withexperientiallearningopportunities insolving relevantlogistics andsupplychainmanagementissues.Topicsfocuson recentlogistics andsupplychainmanagementstudieswithinvariousindustrysectors. Thecourseaimstodevelopskillsandknowledgetomanage contemporary issues in the supply chain management field. Prerequisite: Grade of C- or better in LSCM 315.

## Management (MGT)

Managementcoursesaretaughtbythefaculty oftheDepartment of Accounting and Business Administration. All courses are subject to the leveling policy and prerequisite requirements of the Schroeder Family School of Business Administration. See the "Schroeder Family School of Business Administration" section of this catalog for the complete leveling policy.
MGT 280 Special Topics in Management (3) Covers topics not included in other courses, gives greater depth in certain areas and explores current management topics. Repeatable course. Content changes each time course is offered.
MGT 306 Human Resources (3) Covers the basic components of the human resource management (HRM) function in organizations, including hiring employees, assessing performance, and administering pay and benefits. All these activities must be performed in compliancewiththelaw,so coursealsoaddresses Equal Employment Opportunity laws and other federal legislation and agencies that impact HRM. Prerequisite: Satisfaction of leveling policy. Fall.

MGT 310 Production/Operations Management (3) Survey of the managementproblemsfoundinthemanufacturing ofgoodsandthe deliveryofservices.Variousissuesconsideredwithemphasisonquantitativemodels availableforsolving selected problems.Total quality managementandothermanagementconceptsdiscussed.Prerequisite: MATH 222, QM 227 or equivalent statistics course.
MGT 311 Management Information Systems (3) A study of various types ofcomputer-basedinformationsystemsincludingtheirdesign, acquisitionandoperationfromtheperspectiveofthemanager/end-
user. Prerequisite: Satisfaction of leveling policy.
MGT 331 International Business Strategy (3) Examination of the challenges ofconductingbusinessoutsidethefirm'scountry oforigin. Explores the unique aspects of international business, the internationalenvironment, andforeignenvironmentalforcesfromastrategic perspective. Prerequisite: ECON 101 or 102.
MGT 377 Organizational Behavior (3) Focuses on developing an understanding of the individual and group level factors that influence employee attitudes and behavior at work. Emphasis placed on learningorganizationalbehaviortheories,theirempiricalvalidityand theirpracticalimplications.Topicsincludepersonalityandemotions, motivation, workteams and leadership. Prerequisite:Satisfaction of the School of Business Administration course level policy.
MGT 380 Special Topics in Management (3) Covers topics not included in other courses, gives greater depth in certain areas and explores current management topics. Repeatable course. Content changeseachtimecourseisoffered.Prerequisite:Satisfactionofleveling policy and permission of instructor. Offered periodically.
MGT 392 Managing Global Relationships (3) Focuses on the impact ofcultureonbusiness relationships.Emphasisisplacedonthewaysin whichcultureimpactsmanagerial relationshipswithemployees, with otherbusinesses, andnegotiations. Applicationstotheinternational managementcontext, interculturalnegotiations,andrecommendations for improving expatriate success are highlighted. Prerequisite: Grade of C- or better in MGT 377.
MGT395IndependentStudy (1-3)Independentresearch in managementconductedunderfacultysupervision. Prerequisites:Satisfaction of leveling policy and permission of instructor.
MGT402CompensationandBenefits(3)Examines humanresources managementpracticesthatcompensateemployeesand providebenefits. Covers job evaluation, pay structures, federal laws affecting compensation practices, incentive pay plans, and benefit plans. Prerequisite: Grade of C - or better in MGT 306. Spring.
MGT 412 Leadership (3) Surveys historical and contemporary perspectives on leadership. Includes a heavy experiential emphasis through skill-building modules related to leadership tasks, for example,makingoral presentations,empoweringanddelegating,in motivating others. Provides a comprehensive understanding of the leadership subject from the management literature as well as a personalized, practicalapplicationexperience.Prerequisite:Satisfaction of leveling policy.
MGT 430 Decision Making (3) Develops a theoretical and practical understanding of individual and multiparty decision-making processes.Emphasisplacedonlearningaboutthesystematicwaysin which people'sjudgmentsdeviatefromwhatarationalmodelwould predict. Coverage of multiparty decision making includes an exten-sivetreatmentofnegotiationstrategies.Applicationstothemanagementcontextandrecommendationsforimprovingdecisionmaking are highlighted. Prerequisite: Satisfaction of leveling policy.
MGT 455 Introduction to Logistics and Supply Chain Management (3) An introduction to the analysis and design of domestic and internationallogisticssystemsandsupplychainmanagement.Topics include transportation, warehousing, inventory control, materials handling and packaging, plant and warehouse location decisions, sourcing, and supply chain performance and financial analysis. Additionalemphasisisplacedonconceptsand practicesthat provide firmswithaglobalcompetitiveadvantage.Prerequisite:satisfactionof leveling policy. Same course as LSCM 315.
MGT 475 Competitive Dynamics (3) Examines the interplay betweenfunctionalareasofthefirmaswellastheimportanceofcompetitive analysis. Through the use of a simulation, the integration of
principlesandtechniqueslearnedinaccounting,finance,marketing, andmanagementarehighlighted.Prerequisites:GradeofC-orbetter in ACCT 211, FIN 361, MGT 377 and MKT 325.

MGT497 Global Strategic Management (3) Uses a strategic planning modeltointegrate principles andtechniqueslearnedinaccounting, economics,finance,marketing,managementandquantitativemethods. Examines strategies used to attain and maintain a global competitive advantage. Prerequisites: Grade of C- or better in MGT 377, MKT 325, FIN 361 and senior standing. Senior seminar course. Must earn a grade of C- or better in this course to apply to Outcome 11.
MGT H250 Seminar in Contemporary Leadership (3) Explores various theories of leadership and ethical behavior through the use of cases based on classic and modern firms. Covers topics including conflictresolution,situationalleadership,diversity,authority, power, and organizational culture. Harlaxton summer course only. Offered periodically.

## Marketing (MKT)

Marketing courses are taught by the faculty of the Department of Accounting and Business Administration. All courses are subject to the leveling policy and prerequisite requirements of the Schroeder Family School of Business Administration. See the "Schroeder Family School of Business Administration" section of this catalog for the complete leveling policy.

MKT 325 Principles of Marketing (3) Introduction to basic marketing principles from the perspective of a marketing manager. Topics coveredincludethemarketing concept, productanalysis, consumer behavior, channels ofdistribution, pricing, promotion, international marketing and marketing's role in society. Prerequisite: Satisfaction of leveling policy.
MKT 330 Consumer Behavior (3) Consumer behavior studied from socio-economic, psychological and cultural perspectivesasitrelates to marketing management. Prerequisite: Grade of C- or better in MKT 325.

MKT 373 Personal Selling (3) Studies the responsibilities, activities and psychology of a sales representative with a focus on long-term relationship building. Successful selling practices are introduced including prospecting, establishing rapport, generating curiosity, being persuasive, creating desire, handling objections and closing. Prerequisite: Grade of C- or better in MKT 325.
MKT 374 Integrated Marketing Communication (3) Provides an examination of all elements of the marketing promotion mix advertising, sales promotions, point-of-purchase communication, direct marketing communication, public relations and sponsorship marketing, and personal selling. Overview of marketsegmentation, appeals,budgets,evaluationandmanagementofthepromotionmix. Prerequisite: Grade of C- or better in MKT 325.
MKT 380 Special Topics in Marketing (3) Covers topics not included in other courses. Gives greater depth in certain areas and explores currentmarketingtopics. Repeatablecourse. Contentchangeseach time course is offered. Prerequisite: Grade of C- or better in MKT 325. Offered periodically.

MKT 385 Digital Marketing (3) This course examines timely concernsattheintersectionofmarketingandtechnology.Topicsinclude internettechnologyformarketers,onlineprivacyandsecurityissues, buyerbehavioronline, anddigitalmarketingtechniquessuchasbanneradvertising, advertisingand participating insocialmedia, search engineoptimization, andmobile and emailmarketing. Prerequisite: Grade of C- or better in MKT 325.
MKT 395 Independent Study (1-3) Independent research in marketingconductedunderfacultysupervision. Prerequisite:GradeofC-or
better in MKT 325; permission of the instructor.
MKT 477 International Marketing (3) Examines the impact of culture, economics and legal and regulatory influences on marketing strategy in more than one nation. Prerequisite: Grade of C- or better in MKT 325.

MKT 490 Marketing Research (3) Introduces applications, methods, techniques and functions of market research and information systems. Prerequisite: Grade of C- or better in MKT 325 and QM 227 or an equivalent statistics course.
MKT 492 Strategic Marketing Management (3) Provides an examination of marketing strategy selection and implementation with a focusondecisionmakingand problemsolving.Prerequisite:Gradeof C- or better in MKT 325; senior standing.

## Mathematics (MATH)

Mathematics courses are taught by the faculty of the Department of Mathematics.

MATH 101 Mathematical Ideas (3) Explores a variety of topics, includingnumerationsystems,logic, geometry, probability, andstatistics.Includeshistoricalandcultural perspectiveandcontemporary applications.Backgroundshouldincludetwosemestersofhighschool algebra. Fall, spring.
MATH 105 College Algebra (3) Treats properties of linear, quadratic, polynomial,exponentialandlogarithmicfunctions,inequalities, and systems of equations. Develops critical thinking and emphasizes real-worldapplicationsinthesciencesandtopicalissues.Background should include three semesters of high school algebra. Fall, spring, summer.
MATH 106 Precalculus Trigonometry (1) Provides trigonometric tools necessary for success in Math 221. Develops trigonometric functions using both right triangles and the unit circle approach. Coversgraphing,verification ofidentities, andinversetrigonometric functions.Requiresnopriorknowledgeoftrigonometry.Prerequisite: Grade of C or better in MATH 105 or an acceptable score on a placement exam. Fall, spring.
MATH 134 Survey of Calculus (3) Treats polynomial, exponential, and logarithmic functions, their derivatives and integrals. An introductiontothecalculus ofseveral variablesandapplicationstothenaturalandsocialsciences.Recommendedforstudentswhoplantotake only one semester of calculus not requiring trigonometry. Not open to mathematics majors or minors. Background should include four semestersofhighschoolalgebraandtwosemestersofgeometry.Prerequisite: Grade of C or better in MATH 105 or an acceptable score on a placement exam. Does not satisfy the prerequisite for MATH 222. Credit not given for both MATH 134 and 221. Fall, spring.

MATH 191 Special Topics in Finite Math (1) Study of topics of special interest in finite (non-calculus based) mathematics. Treats materialnotcoveredinothercourses.Topicswillbeannounced.May berepeated.Backgroundshouldincludetwosemestersofhighschool algebra.

MATH 202 Mathematics for Elementary Teachers (3) Treats problem solving, thereal numbersystem,elementarynumbertheory, geometry, andothertopics.Forelementaryeducationmajorsonly.Prerequisite: MATH 101. Spring.
MATH 221 Calculus I (4) Covers parametric and polar equations; limits and continuity; differentiation and integration of algebraic, trigonometric,logarithmic, and exponentialfunctions;andapplications of differentiation. Background should include eight semesters ofhighschoolmathematics,includingfoursemestersofalgebra,two
semestersofgeometry, andatleast 12weeksoftrigonometry.Prerequisite: Grade of $C$ or better in Mathematics 105 and permission of Department of Mathematics, or an acceptablescoreon a placement exam. Credit not given for both MATH 134 and 221. Fall, Spring, Summer.
MATH 222 Calculus II (4) Covers integration techniques and applications of integration. Introduces vectors and matrices, functions of several variables and their derivatives, differential equations, and multiple integrals. Prerequisite: Grade of C- or better in MATH 221. Fall, spring, summer.
MATH 291 Special Topics in Calculus (1) Study of aspects or applicationsofcalculus notcoveredinthestandardcalculussequences.Topics will be announced. May be repeated. Prerequisite: MATH 221.
MATH 310 History of Mathematics (3) Surveys the development of mathematics from the Ishango Bone to Newton, and Leibniz. Emphasizes major mathematical concepts, the cultural contexts in whichtheywerediscovered,andthesolving ofrelatedmathematical problems. Prerequisite: Grade of C- or better in MATH 222.
MATH 323 Calculus III (4) Covers infinite series, vector-valued functions, multipleintegration, lineandsurfaceintegrals, andanalysis of vector fields. Prerequisite: Grade of C- or better in MATH 222. Fall, spring, summer.
MATH 324 Differential Equations (3) Includes standard first- and second-ordermethods,systems, differenceequations, powerseries, Laplace transforms, and numerical and nonlinear methods, with applications for all of these. Prerequisite: Grade of C- or better in MATH 222. Fall, spring, summer.
MATH 330 Financial Mathematics (3) Covers compound interest formulas, annuities, perpetuities,amortizationschedules,bonds, and other securities. Provides preparation for the Society of Actuaries Exam FM. Prerequisite: Grade of C- or better in MATH 222. Fall 2019 (every other fall).
MATH 341 Linear Algebra (3) Covers systems of linear equations, matrices, determinants, vector spaces, linear transformations, and eigenvalues and eigenvectors. Prerequisite: Grade of C - or better in MATH 222. Spring.
MATH 355 Foundations of Geometry (3) Develops from axioms various notions, including point, line, incidence, betweenness, congruence, parallelism, perpendicularity, distance, similarity, and perspective. Geometries include finite, Euclidean and hyperbolic, with emphasis on Euclidean constructions, proofs, transformations, and dynamicgeometry using computer software.Prerequisite:Grade of C- or better in MATH 222 or consent of instructor. Fall 2019 (every other fall).
MATH 365 Probability (3) Develops standard topics in calcu-lus-based axiomatic probability theory and applications, including permutations,combinations,samplespaces,events,randomvariable, independence, conditional probability, distributions, density functions, expectedvalue,andmomentgeneratingfunctions.Prerequisite: Grade of C- or better in MATH 222. Fall.

MATH 370 Discrete and Combinatorial Math (3) Covers such topics as enumeration, principles of logic, set theory, mathematical induction, generating functions, recurrence relations, and graph theory. Prerequisite: Grade of C- or better in MATH 222. Fall.
MATH 373 Numerical Methods (3) Covers numerical comput-er-based methods for solving transcendental equations, systems of linearequations, interpolation, approximation, numericalintegration and differentiation, and numerical solutions of ordinary differential equations. Prerequisite:Computer Science 205 or 210 or equivalent;

Grade of C- or better in Mathematics 222. MATH 341 is suggested but not required. Spring 2019 (every other spring).
MATH 391 Special Topics in Intermediate Math (1) Covers topics not included in other courses to give greater depth in certain areas andtoexplorecurrentmathematicstopics. Topics vary;may include foundationsandsettheory, graphtheory, andnumbertheory.Maybe repeated. Prerequisite: MATH 222; any additional prerequisites will be announced when scheduled.
MATH 420 Advanced Calculus (3) Provides more formal treatment of topics in elementary calculus, including limits, continuity, differentiability, integrability, andinfiniteseries, withemphasison precise definitions and proofs of theorems. Prerequisite: MATH 323. Fall.
MATH 425 Complex Variables (3) Introduction to complex numbers andthecalculusoffunctionsofacomplexvariable.Topicsincludethe algebraand geometry ofcomplexnumbers,limits andderivatives of functionsofacomplexvariable,contourintegrals, TaylorandLaurent series, and residues. Prerequisite: MATH 323.
MATH 431 Long-Term Actuarial Models I (3) Covers the theory and application of contingency mathematics in the areas of life and health insurance, annuities and pensions, using both stochastic and deterministicapproaches.IncludesmaterialcoveredontheSocietyof Actuaries Exam LTAM. Prerequisite: MATH 330, 365. Spring 2020 (every other spring).
MATH 432 Long-Term Actuarial Models II (3) Continues coverage (begun in MATH 431) of the theory and application of contingency mathematics in the areas of life and health insurance, annuities, and pensions, using both probabilistic and multiple state models. Together, MATH 431 and MATH 432 cover most of the material on the Society of Actuaries Exam LTAM. Prerequisite: MATH 431. Offered occasionally.
MATH 445 Abstract Algebra (3) Introduces algebraic structures and their applications. Covers set theory, number theory, modulararithmetic, groups, rings and fields. Prerequisite: MATH 341. Spring 2019 (every other spring).MATH 466 Mathematical Statistics (3) Develops standard topics in mathematical statistics, including sampling distributions, estimation, hypothesis testing, analysis of variance, regression, and correlation. Prerequisite: Grade of C- or better in MATH 365. Spring.
MATH 490 Seminar, Workshop or Independent Study in Math (1) Seminar/workshoptopicsannouncedwhenscheduled. Independent studytopicsselectedbystudentsinconsultationwiththemathematics professor who supervises the work. Prerequisite: Permission of instructor.

MATH 491 Special Topics in Advanced Math (1) In-depth explorationofatopicnotcoveredinothercoursesas preparationforgraduate level mathematics. Topics vary, but may include algebraic topology, analytical numbertheory, codingtheory, differential geometry,functionalanalysis,Lietheory, partialdifferential equations,realanalysis, ring theory, and topology. May be repeated. Prerequisites: MATH 323;anyadditional prerequisites willbeannouncedwhenscheduled.

MATH 495 Senior Seminar: Mathematical Modeling (3) Focuses on theformulation, analysis, andinterpretation ofmathematicalmodels related to contemporary problems drawn from the natural sciences, socialsciences, andmanagementscience.Involvesteamprojectsand aseminarformat.Prerequisites:Seniorstanding;atleasttwocourses chosen from MATH 323, 324, 365, 341, or 373; at least one computer programming class. Fall.
MATH 499 Internship in Mathematics (1) A structured assignment whichallowsthestudenttogainpracticalexperienceinamathemat-
ics-relatedfieldrelatingtoa careerinterest.Thestudentisdirectedby afacultymemberoftheDepartmentofMathematicsandsupervised by a member of the cooperating organization. Prerequisite:Permission of Department of Mathematics.

## Mechanical Engineering (ME)

Mechanical engineering courses are taught by the faculty of the Department of Mechanical and Civil Engineering. Pre-engineering students and students not admitted to the College of Engineering andComputerSciencemaynotenrollinanymechanicalengineering (ME) course numbered 200 or above without specific permission of the instructor, chair, or dean.
ME 101 Introduction to Mechanical Engineering (3) A hands-on introduction to mechanical engineering. Topics include the use of thecomputerinengineering,3Dmodeling, applied physics, proposal preparation,teaming, andanintroductiontomechanicalengineering design process of design, build, \& test. Student teams complete a design project. Prerequisite: Admission to Mechanical Engineering Lower Division. Credit not given for both ME 101 and ME 102. Fall.
ME 102 Introduction to Mechanical Engineering for International Students (3) A hands-on introduction to mechanical engineering. Topicsincludetheuse ofthecomputerinengineering,3Dmodeling, applied physics, proposal preparation,teaming,andanintroduction to mechanical engineering design process of design, build, \& test. Student teams complete a design project. Specific attention is given to properuseoftheEnglishlanguageinengineeringeducationandpractice. Enrollment limited to students for whom English is a second language. Offeredas needed. Prerequisite:AdmissiontoMechanical Engineering Lower Division. Credit not given for both ME 101 and ME 102.
ME 197 Integrated Design I (2) Introduces engineering design as adisciplined, creative, problem-solving processusingrequirements analysis, functional decomposition, system architecture, and test plans. Students work on team-based project. Students learn basic sketchingandmachineshoptechniques inateamenvironment.Prerequisite: ME 101 or 102 with a grade of C - or better or permission of the instructor. May be repeated. Spring.
ME 297 Integrated Design II (2) Introduces computer aided manufacturing. Students are provided the opportunity to work on a large scale project in a team environment. Prerequisite: ME 197 with a grade of C - or better or permission of instructor. May be repeated. Spring.
ME 318 Manufacturing Methods (3) Considers manufacturing processesformetals and non-metals. Includedarecasting,forming, machining, welding, and techniques for manufactured plastics. Includes tours of manufacturing facilities. Corequisites: ENGR 230, 232. Spring.

ME 330 Materials Lab (2) An integrated series of experiments on the physical and mechanical behavior of materials including the effects ofvarioustypes ofloads,time,temperatureandenvironment.Materialsstudiedincludeferrous, plasticsandothernonferrous materials. Prerequisites: ENGR 232 with a grade of C- or better. Corequisites: ENGR 230 or permission of instructor. Fall.
ME 342 Machine Anaylsis (3) Graphical, analytical and comput-er-aidedmethodsofanalyzingdisplacement,velocity,accelerationand dynamicforcesandcouplesfoundinmechanisms.Synthesis/design of simple mechanisms. Prerequisite: ENGR 213 with a grade of C- or better. Fall.
ME 344 Design of Machine Elements (3) Theories of failure. Design using factor of safety and reliability. Steady and variable loading, straight and curved sections. Design of gears, shafts and bearings. Prerequisite: ENGR 232 with a grade of C- or better. Spring.

ME 345 Computer Aided Mechanical Design (3) Design of fasteners, springs, brakes, clutches, chains and belts. Computer optimization. Principles ofconcurrentengineering.Parametricmodelingsoftware for analysis and design. Prerequisite: ME 344.
ME 360 Thermo/Fluid Dynamics Lab (2) Fundamental principles and experiments in thermal and fluid systems. Flow measurement, calorimetry, psychrometrics andengineperformance.Experimental projects in thermo/fluids engineering. Prerequisite:ME 362. Corequisite: ENGR 366. Spring.
ME 362 Thermodynamics (4) An introduction to thermodynamic principlesandthefundamentalsofenergyanalysis. Propertiesofpure substances. First and second laws of thermodynamics. Availability and irreversibility. Gas mixtures and psychometrics. Simple gas and vapor cycles. Prerequisite: CHEM 118. Fall.
ME 368 Heat Transfer (3) One- and two-dimensional steady and transient conduction in isotropic solids. Numerical methods in conduction. Forced and free convection in single phase fluids. Thermal radiation and radiation heat transfer. Prerequisite:ME 362. Corequisite: ENGR 366. Fall.

ME 397 Integrated Design III (3) Includes the statistical analysis of experimentaldata,erroranalysis anduncertaintyanalysis.Basicelectrical and mechanical sensing devices will be covered as part of the completedataacquisitionand processingsystem. Includedismeasurementofdisplacement, velocity,acceleration, pressure,flow,temperature, force, torque, strain vibration and other physical phenomena. Corequisites: EE 215; ENGR 366 or permission of instructor. Spring.
ME 424 Engineering Biomechanics (3) This course is designed to give students the abilities to quantitatively analyze kinematics and kinetics of human movement and to evaluate data collection instrumentationoptions.Students willdevelopthree-dimensionalmodels ofhumanbodysegmentsfor purposes of evaluating human motion withrespecttospecificapplications.Studentswilldevelopprograms of their own to compute human kinetic and kinematic parameters from biomechanical data sets. Prerequisites: ENGR-213, BIOL-112, and MATH-323.
ME 428 Special Topics in Biomedical Engineering (3) An advanced course in biomedical engineering topics. Example topics include mechanics of biomaterials, dynamics of blood flow, cardiovascular physiology,orthopaedics, andvariablecurrenttopicsbasedonstudent interest. Prerequisites: ENGR-366 and ENGR-232.
ME 432 Advanced Mechanics of Materials (3) Relations between loads, deformations, stresses and strains;curved beams; beams on elastic supports; thick-walled cylinders; unsymmetrical bending; failuretheories;energymethodsforstaticallyindeterminatemembers. Prerequisite: ENGR 232.
ME 434 Fracture Mechanics (3) Elements of dislocation theory; propertiesofmono-crystalline,poly-crystalline,amorphousandpolymericmaterials;relationsbetweensolidstatedefectsandmechanical properties;fatigue, creep and fracture of materials. Prerequisite: ENGR 232.
ME 444 Computer Aided Mechanical Design (3) Design offasteners, springs, brakes, clutches, chains and belts. Computer optimization. Principles ofconcurrentengineering.Parametricmodelingsoftware for analysis and design. Prerequisite: ME 344.
ME446 Finite Elements (3) Introduces the finite element method for thesolution of problemsencounteredinstressanalysis, heattransfer and fluid mechanics. Theoretical concepts are covered as well as the applicationofpopularcomputersoftwarepackages.Prerequisites:ME 344; ENGR 366.
ME 448 Mechanical Vibrations (3) Kinematics of vibratory motion,
studyofsingleandmulti-degreeoffreedomsystems.Dynamicforces in vibrating systems. Computer applications in vibration analysis. Prerequisite: MATH 324; ENGR 213.
ME 452 System Modeling and Control (3) Mathematical and computermodelingofdynamiclumped parametermechanical,electrical, hydraulicandpneumaticsystems.Responseoffirstandsecondorder systems.Introductiontofeedbackcontroloflinearsystems.Prerequisites: ENGR 213; MATH 324.
ME 453 Mechatronics (3) Hands-on use of actuators and sensors in thedesignofelectro-mechanicalsystems.Systemsmayincludeelectricmotors,shapememoryalloys,pneumaticandhydraulicactuators, solenoids, position and proximity sensors. Students learn a synergistic designapproach incorporating mechanics, electronics,computer programmingandcontrols.Prerequisites:MechanicalEngineering397,452.
ME 462 Advanced Thermodynamics (3) Real gases and gas mixtures, thermodynamicsofstaterelationships.Combustionandthermochemistry. Concepts of statistical thermodynamics. Prerequisite: ME 362.
ME 463 Principles of Turbomachinery (3) Turbomachine classification. Performance characteristics of centrifugal pumps and compressors and radial and axial flow turbines. Basic fluid and thermodynamicanalysisofturbomachineflowprocesses.Rudiments of design. Prerequisites: ME 362, ENGR 366 or permission of instructor.
ME 465 Internal Combustion Engines (3) Theoretical and actual cycles, production oftorqueandcombustionmodeling.Mechanical designofengines,fuelinjectionandemissionsystems. Prerequisites: ME 342, 362
ME 466 Introduction to Computational Fluid Dynamics (3) Development of the Navier-Stokes equations for laminar and turbulent flow. Methods for discretizing and solving the equations. Turbulent flow and turbulence modeling. Applications using commercial CFD software. Prerequisites: ENGR-366; MATH-324.
ME 468 Advanced Heat Transfer (3) Multidimensional heat conduction.Boiling andcondensationheattransfer.Computer-assisted analysisofconduction, convectionandradiation.Analysisanddesign ofheatexchangersandotherheattransfersystems.Prerequisites:ME 368; MATH 324.
ME 470 Combustion (3) Covers fundamental concepts of non-reactive ideal gas mixtures, thermochemistry, chemical equilibrium, chemicalkineticsandreactivegasdynamics (deflagrationsanddetonations). Prerequisite: ME 362.
ME 472 Energy Systems (3) Energy sources and energy conversion. Principles of heat pump systems, solar energy, wind power, fuel cells andintroduction to nuclearengineering. Prerequisites:ME362,368.
ME 473 Heating, Ventilation and Air Conditioning (3) Methods of controlling temperature and humidity in buildings. Calculation of heatingandcoolingloads.Mechanicalsystemsforheatingandairconditioning. Prerequisites: ENGR 366, ME 362. Corequisite: ME 368.
ME 474 Environmental Engineering I (3) Introduction to environmentalengineeringtopics, including waterquality, watertreatment processes, air quality, solid and hazardous waste management, and environmentalsustainability.Includesastudyofenvironmentallaws. Prerequisite: CHEM 118 with lab. Spring.
ME 476 Power Plant Engineering (3) Modern central station power generating systems. Turbine cycles and performance. Fuels and combustionequipment. Steam generatordesignand performance. Rudiments of heat transfer equipment and turbomachinery design. Prerequisites: ENGR 366; ME 362.
ME495 Professional Practice I (3) Students develop a proposal for an
engineering project,completetheengineeringdesign,andbeginfabrication.Studentsareintroducedtoprofessional skills,suchasproject and time management, teaming, and ethics. Prerequisites: ENGR366; ME-344; or permission of instructor. Corequisite: ME-368 or permission of instructor. Fall.
ME497 Professional Practice II (3) Complete the semester-long project proposedinMechanical Engineering 495.Alldesign aspects and testingdocumentedinaformalwritten reportanddefendedthrough anoral presentation oftheresultsto peers,faculty andindustrial customers. Prerequisite: ME 495.
ME 498 Independent Study: Mechanical Engineering (1) Independentstudy ofatopic ofinteresttothestudent.Requiresfacultysponsor and approved detailed study plan.
ME 499 Special Topics: Mechanical Engineering (1) Formal lecture/ laboratory study of topics of special interest. Topics announced. Repeatablecourse.Contentchangeseachtimecourseisoffered.Prerequisites announced when scheduled.

## Military Science Leadership (MSL)

MSL 101 Fundamental Military Concepts (1) The course introduces students to the basic officer competencies, establishes a firm foundation for continued study in higher ROTC courses, and instructs basic life skills pertaining to personal fitness and interpersonal communication skills. Students will be introduced to the U.S. Army values, national values, and expected ethical behavior. Students will be exposed to the unique duties and responsibilities of officers and theexpectationsofselflessservice, dedication, anddutytothenation. Designed to introduce basic soldier skills and squad level tactical operations.Attentionisdevotedtodevelopmentofleadershippotential through practical exercises both in and out of the classroom. Fall.
MSL 102 Basic Leadership (1) Examines the leadership process as affected by individual differences and styles, group dynamics, and personality behavior of leaders. Will introduce a generic model of problem solving. Teaches the basic skills that underlie effective problem solving in different work environments. Instructs how to relate the problem-solving model and basic problem solving skills to the resolution of military problems. Students will experience an introductionoffundamentalleadershipconceptsandexaminefactors thatinfluenceleaderandgroupeffectiveness.Designedtoteachbasic soldierskillsandsquadleveltacticaloperations.Studentinvolvement in briefings and hands on practical exercises. Attention is devoted to developmentofleadershippotentialthroughpracticalexercisesboth in and out of the classroom. Spring.
MSL201 Advanced Leadership and Management (2) Develops basic leadership abilities and management skills through instruction and handson practical exercises. Introduces principlesandtechniques of effective written and oral communication. Teaches practical leader skillsandexaminesthe principleofsubordinatemotivationandorganizationalchange.Studentswillapplyleadershipand problemsolving toa complexcasestudy/simulation.Classisdesignedtodevelopindividual team skills, decision-making abilities, and test basic tactical proficiencyskillsaswellasimproveplanningandorganizationalskills bothinandoutoftheclassroomenvironment.Teacheshands-onsoldierskillsandsquadleveltactical operations. Attention is devoted to developmentofleadershippotentialthrough practicalexercisesboth in and out of the classroom. Fall.
MSL 202 Leadership, Tactics and Officership (2) Develops leadership skills by focusing on conventional basic squad and small unit tactics and introduces students to the basictactical principles of maneuver. Examines the roots of national and Army values and better citizenship. Allows students to apply principles of ethical decision-making and resolve ethical issues in case studies. Examines the legal and
historical foundations and duties and function of the Army officer. Students will analyze the roles officers played in the transition of the Army from the Vietnam Conflict to the 21st Century. Teaches basic soldier skills and squad-level tactical operations. Special attention isdevotedtodevelopmentofleadershippotentialthrough practical exercises both in and out of the classroom. Spring.
MSL 204 Leader's Training (Basic Camp) (4) Conducted at Fort Knox, Kentucky, home of the United States Armor Branch, during the summer months, covering a training period of approximately 30 days of paid training and excitement. The Department of Military Science ROTC battalion provides travel to and from Fort Knox. While at camp you will meet students from all over the nation while earning approximately $\$ 800$ in pay and receive free room and board while at camp. While at camp, you may have opportunities to earn a two-year ROTC scholarships. The Basic Camp is a way to catch up on missed Military Science courses in order to qualify the student to contract into the Advanced ROTC Course at USI. Prerequisite: Departmental approval. Summer.
MSL 241 US Military History I (1740-1900) (3) The course will focus on U.S. military activity from the French and Indian War through the Spanish American War. Emphasis is on issues in command, impacts of technology, andtheevolutionofstrategyandtacticsinmodernwarfare. Studentswillconductabattleanalysisusingavarietyoftechniques.Fall.
MSL 242 US Military History II (1900-Present) (3) The course will focus on U.S. military activity from before WWI through the Persian Gulf War as well as highlighted concepts in contemporary peacekeepingoperations.Emphasisisonissues incommand,impacts of technology, and the evolution of strategy and tactics in modern warfare. Students will conduct a battle analysis using a variety of techniques. Spring.
MSL 301 Small Unit Leadership (3) Course is designed for those students who contract with Army ROTC to continue their military studies in pursuit of a commission as on officer into the Army followinggraduationfromcollege.Coursefocusistobuildcadetleadership competencies in preparation for attendance and successful completion of ROTC Advanced Course, Ft. Knox, Kentucky. Provides an in-depth review of the features and execution of the Leadership DevelopmentProgram, providingthecadetwith periodicassessment of performance in leadership positions. Students will study squad andplatoon-leveltactics,troop-leading procedures, missionanalysis, land navigation skills training, military operations plans and orders development,executionofsquadbattledrills,andbasicbriefingtechniques. Prerequisite: Department approval. Fall.
MSL 302 Small Unit Operations (3) Course is a follow-on module to the MS 301 class, preparing cadets for attendance and successful completion of ROTC Leader Development and Assessment Course, Ft. Lewis, Washington. Focus will center on advanced self-development through the Leadership Development Program and an advanced-learningenvironmentofdoctrinalleadershipandtactical operations at the small unit level. Cadets will plan and conduct individual andcollectiveskilltraining foroffensiveoperationsandaField Training Exerciseduringthespringsemester.Cadets will beexposed to the developmental counseling program throughout the course period. Prerequisite: MSL 301 and departmental approval. Spring.
MSL401 Leadership,Management, and Ethics (3) Course is designed to develop, train, and transition the advanced course graduate from cadet to lieutenant for service as an officer. Cadet will study Army stafforganizations, howtheyfunction, andtheprocesses ofthearmy's hierarchyorganizationalstructure.Studentswilllearnin-depthcoun-selingresponsibilities/methods,officerandnon-commissionedofficer evaluationreportdevelopment,officerevaluationreportsupportform development, and training plan development. Course analyzes the
legalaspectsofdecision-makingandleadershipinaction.Coursewill exposecadetstothefoundationsofleadership,operationallaw,and the key aspects of the Uniformed Code of Military Justice. Cadets will receive training on basic leader responsibilities to foster an ethical command climate and how to meet moral obligations, as well as leaderresponsibilitiestoaccommodatesubordinatespiritual needs. Prerequisite: Departmental approval. Fall.
MSL 402 Transition to Lieutenant (3) Continued advanced developmentandtransitionoftheadvancedcampgraduatefromcadetto lieutenant for service as an officer. Course is a follow-on module to the MS 401 class. Course will expose cadets to the in-depth study ofleadership, operationallaw, and the key aspects of the Uniformed Code of Military Justice with a hands-on approach with interactive scenarios being utilized in class. Students will undergo hands-on training and instruction in Joint Ethics regulations, joint strategic level operations, study of army administrative and logistics management, in depth counseling techniques, and duty at first military assignment. Course will cover the Army's training philosophy, METL development,equipmentreadiness, andrulesofengagementduring deploymentoperations.Studentsalsowillreceivetraininginpersonal awareness financial planning. Prerequisite: MSL 401. Spring

## Music (MUS)

Music courses are taught by the faculty of the Department of Music.
APM 101, 201, 301, 401 Baritone/Euphonium (1-3) Applied music lesson offered in the indicated instrument. Students registering for one credit hour of applied music will receive one 30-minute private lesson perweek.Studentsregisteringfortwocredithourswillreceive one60-minuteprivatelessonperweek.Repeatablecourses.Content changes each time course is offered. Prerequisite: Music major or minor or permission of the instructor.
APM 102, 202, 302, 402 Bassoon (1-3) Applied music lesson offered in the indicated instrument. Students registering for one credit hour of applied music will receiveone 30 -minute private lesson perweek. Students registering fortwo credit hours will receive one60-minute private lesson perweek. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minoror permission of the instructor.
APM 103, 203, 303, 403 Cello (1-3) Applied music lesson offered in the indicatedinstrument. Students registering for one credithour of applied music will receiveone 30-minute privatelesson perweek. Students registering fortwo credit hours will receive one60-minute private lesson perweek. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minoror permission of the instructor.
APM 104, 204, 304, 404 Clarinet (1-3) Applied music lesson offered in the indicated instrument. Students registering for one credit hour of applied music will receiveone 30 -minute private lesson perweek. Students registering for two credithours will receive one60-minute private lesson perweek. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minoror permission of the instructor.

APM 106, 206, 306, 406 Flute (1-3) Applied music lesson offered in the indicated instrument. Students registering for one credithour of applied music will receiveone 30 -minute private lesson perweek. Students registering fortwo credit hours will receive one60-minute private lesson perweek. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minoror permission of the instructor.
APM 107, 207, 307, 407 French Horn (1-3) Applied music lesson offered in the indicated instrument. Students registering for one
credit hour of applied music will receive one 30-minute private lesson per week. Students registering for two credit hours will receive one60-minuteprivatelessonperweek.Repeatablecourses.Content changes each time course is offered. Prerequisite: Music major or minor or permission of the instructor.
APM 108, 208, 308, 408 Guitar (1-3) Applied music lesson offered inthe indicated instrument. Students registering for onecredithour of applied music will receive one30-minute privatelesson perweek. Students registering fortwo credithours will receive one60-minute private lesson per week. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minor or permission of the instructor.

APM 109, 209, 309, 409 Harp (1-3) Applied music lesson offered inthe indicated instrument. Students registering for onecredithour of applied music will receiveone30-minute private lesson perweek. Students registering fortwo credithours will receive one60-minute private lesson perweek. Repeatablecourses. Content changes each time course is offered. Prerequisite: Music major or minor or permission of the instructor.
APM 110, 210, 310, 410 Harpsichord (1-3) Applied music lesson offered in the indicated instrument. Students registering for one credit hour of applied music will receive one 30-minute private lesson per week. Students registering for two credit hours will receive one60-minuteprivatelessonperweek.Repeatablecourses.Content changes each time course is offered. Prerequisite: Music major or minor or permission of the instructor.
APM 111, 211, 311, 411 Lute (1-3) Applied music lesson offered in the indicated instrument. Students registering for one credit hour of applied music will receive one30-minute privatelesson perweek. Students registering fortwo credit hours will receive one60-minute private lesson perweek. Repeatable courses. Contentchanges each time course is offered. Prerequisite:Music major or minor or permission of the instructor.

APM 112, 212, 312, 412 Oboe (1-3) Applied music lesson offered inthe indicated instrument. Students registering for one credit hour of applied music will receive one 30-minute private lesson perweek. Students registering for two credit hours will receive one60-minute private lesson per week. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minor or permission of the instructor.
APM 113, 213, 313, 413 Organ (1-3) Applied music lesson offered inthe indicated instrument. Students registering for one credithour of applied music will receiveone 30-minute private lesson perweek. Students registering fortwo credit hours will receive one60-minute privatelesson perweek. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minor or permission of the instructor.

APM 114, 214, 314,414 Percussion (1-3) Applied music lesson offered in the indicated instrument. Students registering for onecredithour of applied music will receive one 30-minute private lesson perweek. Students registering for two credithours will receive one60-minute private lesson perweek. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minororpermission of the instructor.
APM 115, 215, 315, 415 Piano (1-3) Applied music lesson offered in the indicatedinstrument. Students registering foronecredithour of applied music will receive one 30-minute private lesson per week. Students registering for two credit hours will receive one60-minute privatelesson perweek. Repeatablecourses.Content changes each time course is offered. Prerequisite:Music major or minor or permission of the instructor.

APM 116,216,316,416Saxophone(1-3) Applied musiclesson offered in the indicatedinstrument. Students registering for one credithour of applied music will receiveone 30-minute privatelesson perweek. Students registering fortwo credithours will receive one60-minute private lesson perweek. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minor or permission of the instructor.
APM 117, 217, 317, 417 String Bass (1-3) Applied music lesson offered inthe indicatedinstrument. Students registering for one credithour of applied music will receiveone 30 -minute private lesson perweek. Students registering fortwo credithours will receive one60-minute private lesson perweek. Repeatable courses. Contentchanges each time course is offered. Prerequisite:Music major or minor or permission of the instructor.
APM 118, 218, 318, 418 Trombone (1-3) Applied music lesson offered in the indicatedinstrument. Students registering for one credithour of applied music will receiveone 30 -minute private lesson perweek. Students registering fortwo credithours will receive one60-minute private lesson per week. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minoror permission of the instructor.
APM 119, 219, 319, 419 Trumpet (1-3) Applied music lesson offered in the indicated instrument. Students registering for one credithour of applied music will receiveone 30 -minute private lesson perweek. Students registering fortwo credithours will receive one60-minute private lesson perweek. Repeatable courses. Contentchanges each time course is offered. Prerequisite:Music major or minoror permission of the instructor.

APM 120, 220, 320, 420 Tuba (1-3) Applied music lesson offered in the indicated instrument. Students registering for onecredithour of applied music will receiveone 30 -minute private lesson perweek. Students registering for two credithours will receive one60-minute private lesson perweek. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minoror permission of the instructor.
APM 121, 221, 321, 421 Viola (1-3) Applied music lesson offered in the indicatedinstrument.Students registering foronecredithour of applied music will receive one 30-minute private lesson per week. Students registering fortwo credithours will receive one60-minute private lesson per week. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minoror permission of the instructor.

APM 122, 222, 322, 422 Violin (1-3) Applied music lesson offered in the indicated instrument. Students registering for one credithour of applied music will receiveone 30 -minute private lesson perweek. Students registering fortwo credithours will receive one60-minute private lesson perweek. Repeatable courses. Contentchanges each time course is offered. Prerequisite:Music major or minor or permission of the instructor.
APM 123, 223, 323, 423 Voice (1-3) Applied music lesson offered in the indicatedinstrument. Students registering for onecredithour of applied music will receiveone 30 -minute private lesson perweek. Students registering fortwo credithours will receive one60-minute private lesson per week. Repeatable courses. Content changes each time course is offered. Prerequisite:Music major or minor or permission of the instructor.

APM 124, 224, 324, 424 Voice (Musical Theatre) (1-2) Applied musiclessonofferedintheindicatedinstrument.Studentsregistering foronecredithourofappliedmusicwillreceiveone30-minuteprivate lessonperweek.Studentsregisteringfortwocredithourswillreceive one60-minuteprivatelessonperweek.Repeatablecourses.Content
changes each time course is offered. Prerequisite: Music major or minor or permission of the instructor.
APM 125, 225, 325, 425 Jazz Guitar (1-3) Applied music lesson offered in the indicated instrument. Students registering for one credit hour of applied music will receive one 30-minute private lesson per week. Students registering for two credit hours will receive one60-minuteprivatelessonperweek.Repeatablecourses.Content changes each time course is offered. Prerequisite: Music major or minor or permission of the instructor.
MUS 100 Recital Attendance (0) This course exposes students to a variety of musical styles and artistic interpretations through attendance at concerts and recitals. Students will attend a minimum of 15 performanceseachsemesteraccordingtotheguidelinesestablishedin theMusicStudent Handbookand completeattendance verification for each. No prerequisite. Pass/fail.
MUS 101 Recital Attendance (0) This course exposes students to a variety of musical styles and artistic interpretations through attendance at concerts and recitals. Students will attend a minimum of 15 performanceseachsemesteraccordingtotheguidelinesestablishedin the Music Student Handbookand completeattendanceverification for each. No prerequisite. Pass/fail.
MUS 102 Diction I (1) Presents the International Phonetic Alphabet and the diction rules for correct singing pronunciation of English, Italian, Latin, German, and French. Combines lecture, oral readings, and practice skills in use of IPA. Prerequisite: Music major or permission of instructor.
MUS 103 Diction II (1) Presents the International Phonetic Alphabet and the diction rules for correct singing pronunciation of English, Italian, Latin, German, and French. Combines lecture, oral readings, and practice skills in use of IPA. Prerequisite:Music major or permission of instructor.
MUS 104 Basic Piano I (1) Group instruction in piano with simple literatureandthedevelopmentofskillsintechniques,sight-reading, harmonization,transposition,andimprovisation.Designedtoprepare for the Piano Proficiency l exam. Prerequisite: Music major or minor or permission of instructor.
MUS 105 Basic Piano II (1) Group instruction in piano with simple literatureandthedevelopmentofskillsintechniques,sight-reading, harmonization,transposition, andimprovisation.Designedtoprepare for the Piano Proficiency l exam. Prerequisite: Music major or minor or permission of instructor.
MUS 110 University Bands (1) (Section 1) Includes the finest wind andpercussionstudentswithinandoutsidetheDepartmentofMusic. Presentsseveralconcertseachsemesterfeaturingadvancedlevelmusic andservesasoneofthetouringensembles.Studentsalsoparticipate in University Band and Aces Brass as part of this course. Audition requiredeachsemesterforentranceandseating placement. (Section 2) Presents a concerteach semester.Smallergroups from withinUniversity BandmakeupAcesBrass, which performsathomebasketball games and MVC and NCAA tournaments. Open to music majors and non-majors. No audition required; seating at discretion of director.
MUS 113 Jazz Ensemble (1) (Section 1: Big Band) Full size band, performs on campus each semester. Other activities include performances with guestartists, jazzfestivals, and regionaltours. Audition required. (Section 2: Lab Band) Full size band, performs on campus each semester. Audition not required.
MUS 114 Saxophone Ensemble (1)
MUS 115 Clarinet Ensemble (1)
MUS 116 Woodwind Chamber Ensemble (1)

## MUS 117 Flute Ensemble (1)

MUS 118 Small Jazz Ensemble (1)
MUS 119 Guitar Ensemble (1)
MUS 120 University Symphony Orchestra (1) Select 60 member ensemblethatpresentsseveralconcertseachsemesterfeaturingstandard orchestral repertoire. Open to both music majors and non-majors from across the University community. Audition required.
MUS 122 String Chamber Ensemble (1)
MUS 125 Brass Ensemble (1)

## MUS 127 Percussion Ensemble (1)

MUS 130 University Choir, Women Chorus, and Mixed Choir (1) (Section 1: University Choir) Composed of the finest vocal talent on campus, this choir has built a reputation for performances of major choral-orchestralmasterworks,a cappellamusic, partsongs,and spirituals.Ithastouredextensively.Auditionrequired.Sectionplacement for MUS 130-430 is at the discretion of the Director of Choral Activities. (Section 2: Women's Chorus) Presents a choral concert each semester and participates in the annual Holiday Pops concert. Some musical/choralbackgroundandabriefauditiontoassesspitch-matching ability is required. Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities. (Section 3: Mixed Choir) A large choir for men and women from across campus, this choirfocuses on a variety of choral music and choral styles in the traditional SATB format. Typically, Mixed Choir performs on programs alongside Women's Chorus, but also joins with University Choir for large works for soprano, alto, tenor, and bass voices. Brief audition required. Repeatable course. Content changes each time course is offered. Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities.
MUS 132 Kantorei (1) Explores vocal chamber repertoire with specificemphasisonsixteenthandearlyseventeenthcenturymadrigals and motets. Audition and concurrent enrollment in MUS-130-430 sec. 01 (University Choir) required.
MUS 138 Opera Main Stage (1) Emphasis on broadening knowledgeandskillsthroughstudiesand performancesofextendedopera scenes,full-lengthoperaproductions,orotherpublicperformances of repertoire.
MUS 139 Keyboard Accompanying (1) Instruction in the technique andartofmusical collaborationonthepiano,organandharpsichord.
MUS 140 Diatonic Harmony (5) Intensive instruction in basic musical notational and aural materials, followed by study and analysis of diatonicharmony (intervals,triadandseventhchords, harmonicprogressionandvoiceleading).Integratedapproachincludesauralskills and sight singing training. Credit not given for both MUS 140 and 141.Prerequisite:TheoryAssessmentTestorpermission ofinstructor.

MUS 141 Diatonic Harmony (3) Study and analysis of diatonic harmony including intervals, triad and seventh chord structure, harmonic progression and voice leading. Integrated approach that includes aural skills and sight singing training. Prerequisite:Successful completion of theory assessment or permission of the instructor.
MUS 142 Chromatic Harmony (3) Continued study and analysis to include chromatic harmony (secondary dominants, Neapolitan chords, augmented sixth chords, mode mixture, and modulation) withintegration ofauralskillsandsightsingingtraining.Prerequisite: MUS 140 or 141.

MUS 154 Introduction to Music (3) Non-technical approach to the history of music as an art in Western society from its beginnings to the present day, with a focus on the music and composers of the last 300 years. Not open to music majors.

MUS 155 Music and Film (3) Survey of the union of music and film fromitsearliestinceptiontothepresentwithafocusontheAmerican motion picture industry and its musical traditions.
MUS 156 Music in America (3) Survey of music in the United States from colonialtimestothepresentwithafocusonthedevelopmentof an American musical style and language in the art, folk, and popular realms.
MUS 158 Jazz History (3) Survey of the history of jazz, the development of major stylistic trends and principal contributors to the medium. Includes aural stylistic analysis.
MUS 159 History of Musical Theatre (3) The History of Musical Theatre is an intense study of musical theatre genres, composers, lyricists, performers, directors, and choreographersandtheircontributions to this musical form in America from 1750 to the present. Includes consideration of how music theatre developed from, and reflected the cultural, social, and political landscape of its time. Studentswilldemonstratetheacquisition ofthisknowledgethrough written assignments, quizzes, exams, and presentations.
MUS 171 Foundations of Music Education (3) This course is a survey of the music education profession inthe United States. It includes an overviewofprofessionalqualificationsandresponsibilities,history of music education in the United States and its influences, philosophical and theoretical positions in music education, an introduction to developmentaland psychologicalconceptsoflearningandcognition in the context of the music classroom, the importance of music in schools. Includes fundamentals of music education curriculum, state and national standards, standards-based lesson planning, and assessment.Includesdevelopmentofessential professionalskillssuch aswriting, communication, andusing appropriatetechnology.Some field experiences included.
MUS 184 Orientation to Music Therapy (3) Examines music therapytreatmentprinciplesandstrategieswithvariouspopulations, the history of the use of music in therapy, the role of the music therapist ontheinterdisciplinaryteam,musictherapyliterature.Studentsmust earn a grade of C - or better.
MUS 188 Music Therapy Practicum (1) This course provides clinical training at various treatment facilities throughout the city. All trainingconductedunderthesupervision ofaqualifiedmusicaltherapist. A grade of B - or better must be earned. This course is one of the six practicathat must be completed beforestudent is eligibleto begina full-timeinternship.Opentomusictherapymajorsonlyandnotopen to first-semester freshman. This course can be repeated only once.
MUS 200 Recital Attendance (0) This course exposes students to a variety of musical styles and artistic interpretations through attendance at concerts and recitals. Students will attend a minimum of 15 performanceseachsemesteraccordingtotheguidelinesestablishedin theMusic StudentHandbookand completeattendance verification for each. No prerequisite. Pass/fail.
MUS 201 Recital Attendance (0) This course exposes students to a variety of musical styles and artistic interpretations through attendance at concerts and recitals. Students will attend a minimum of 15 performanceseachsemesteraccordingtotheguidelinesestablishedin theMusicStudentHandbook and completeattendance verification for each. No prerequisite. Pass/fail.
MUS 204 Basic Piano III (1) Advanced group instruction with moreadvancedsoloandensembleworkandemphasisontechnique, sight-reading, harmonization,improvisation, transposition, memorization, and accompanying. Designed to prepare for the Piano Proficiency II. Prerequisites: MUS 105; completion of Piano Proficiency I; permission of instructor.

MUS 205 Basic Piano IV (1) Advanced group instruction with more advanced solo and ensemble work and emphasis work and emphasisontechnique,sight-reading,harmonization,improvisation, transpositionandaccompanying.Designed to prepareforthe Piano Proficiency II. Prerequisites: MUS 105; completion of the Piano Proficiency l; permission of instructor.
MUS 210 Univ Bands (1) (Section 1) Includes the finest wind and percussion students within and outside the Department of Music. Presentsseveralconcertseachsemesterfeaturingadvancedlevelmusic andservesasoneofthetouringensembles.Studentsalso participate in University Band and Aces Brass as part of this course. Audition requiredeachsemesterforentranceandseating placement. (Section 2) Presents a concerteach semester.Smaller groupsfrom within University Bandmakeup AcesBrass, which performsathomebasketball games and MVC and NCAA tournaments. Open to music majors and non-majors. No audition required; seating at discretion of director.
MUS 213 Jazz Ensemble (1) (Section 1: Big Band) Full size band, performs on campus each semester. Other activities include performances with guestartists, jazzfestivals, and regional tours. Audition required. (Section 2: Lab Band) Full size band, performs on campus each semester. Audition not required.
MUS 214 Saxophone Ensemble (1)
MUS 215 Clarinet Ensemble (1)
MUS 216 Woodwind Chamber Ensemble (1)
MUS 217 Flute Ensemble (1)
MUS 218 Small Jazz Ensemble (1)
MUS 219 Guitar Ensemble (1)
MUS 220 University Symphony Orchestra (1) Select 60 member ensemblethatpresentsseveralconcertseachsemesterfeaturingstandard orchestral repertoire. Open to both music majors and non-majors from across the University community. Audition required.
MUS 222 String Chamber Ensemble (1)
MUS 225 Brass Ensemble (1)
MUS 227 Percussion Ensemble (1)
MUS 230 University Choir, Women Chorus, and Mixed Choir (1) (Section 1: University Choir) Composed of the finest vocal talent on campus, this choir has built a reputation for performances of major choral-orchestralmasterworks,a cappellamusic, partsongs,andspirituals.Ithastouredextensively.Auditionrequired.Sectionplacement for MUS 130-430 is at the discretion of the Director of Choral Activities. (Section 2: Women's Chorus) Presents a choral concert each semester and participates in the annual Holiday Pops concert. Some musical/choralbackgroundandabriefauditiontoassesspitch-matching ability is required. Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities. (Section 3: Mixed Choir) A large choir for men and women from across campus, this choirfocuses on a variety of choral music and choral styles in the traditional SATB format. Typically, Mixed Choir performs on programs alongside Women's Chorus, but also joins with University Choir for large works for soprano, alto, tenor, and bass voices. Brief audition required. Repeatable course. Content changes each time course is offered. Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities.
MUS 232 Kantorei (1) Explores vocal chamber repertoire with specificemphasisonsixteenthandearlyseventeenthcenturymadrigals and motets. Audition and concurrent enrollment in MUS-130-430 sec. 01 (University Choir) required.

MUS 236 Guitar and Voice Techniques I (1) Develops proficiency
for playing a variety of songs on guitar and explores techniques for teachingguitar.Thecoursealsodevelopsvocaltechniquesand proficiency in properlyusingthespeakingandsingingvoice.Studentswill learntosingandaccompanyabasicrepertoireoftraditional,folk, and popular songs. Prerequisite: Music major or minor or permission of instructor. Students must earn a grade of C- or better.
MUS 237 Guitar and Voice Techniques II (1) Develops proficiency for playing on guitar and singing a variety of songs. Students will develop their singing voices and learn to sing and accompany a repertoireoffolkandpopularsongsrepresentingvariouserasandstyles. Prerequisite: MUS-236 or permission of instructor. Students must earn a grade of C - or better.
MUS 238 Opera Main Stage (1) Emphasis on broadening knowledgeandskillsthroughstudiesandperformances ofextendedopera scenes,full-lengthoperaproductions,orotherpublic performances of repertoire.
MUS 239 Keyboard Accompanying (1) Instruction in the technique andartofmusicalcollaborationonthe piano,organandharpsichord.
MUS 241 Introduction to Form (3) Introduces fundamental designs, processes, and structures ofmusic oftheeighteenth and nineteenth centuries. Continues aural skills and sightsinging training. Prerequisite: MUS 142.
MUS 242 Post-Tonal Theory (3) Covers a wide range of analytical approaches to post-tonal music, with an emphasis on major works from the 20th and 21st centuries. Topics include scalar music, free atonality, serialism, neo-classicism, minimalism, and some recent compositional trends. Prerequisite: MUS 142.
MUS 243 Jazz Theory (2) Introduces specialized terminology of jazz theory and relates it to traditional harmony through the study and analysis of jazz music. Topics include chord construction and the II-V-I progression through scale theory, the blues, chord changes, slash chords, the bebop and pentatonic scales, how to read a lead sheet,basictunememorization, andre-harmonization.Prerequisites: MUS 142 and MUS 105 or permission of instructor.
MUS 245 Jazz Improvisation (2) Introduction to jazz improvisation with concepts and usage of jazz harmony. Experience with use of scale-chord relationships, jazz notation, ear training, rhythmic concepts, jazz style, and articulation. Students required to improviseon theirdeclaredmajorinstrument.Developmentofinstructionalstrategiesforuseinteachingimprovisationalsoaddressed.Prerequsites: MUS 105, 142, and 243, or permission of instructor.
MUS 260 Suzuki Pedagogy I (2) In-depth study of the philosophy and pedagogyoftheSuzukiTalentEducationviolinmethodfounded by Shinichi Suzuki. Includes the repertoire contained in the foundation unitsoutlinedintheSuzukiAssociation oftheAmericas'Teacher Development Document. Emphasis on both pedagogical understanding and performance skills of the repertoire. Must be taken in order unless special permission obtained from the instructor. Open to violinists and violists only. Prerequisite: Ability to meet Suzuki Association requirementsforbeginningleveltrainingandPermission of the instructor.

MUS 261 Suzuki Pedagogy II (2) In-depth study of the philosophy and pedagogy oftheSuzukiTalentEducationviolinmethodfounded by Shinichi Suzuki. Includes the repertoire contained in the foundationunitsoutlinedintheSuzuki Association oftheAmericas'Teacher Development Document. Emphasis on both pedagogical understanding and performance skills of the repertoire. Must be taken in order unless special permission obtained from the instructor. Open to violinists and violists only. Prerequisite: Ability to meet Suzuki Association requirementsforbeginningleveltrainingandPermission of the instructor.

MUS 262 Woodwind Techniques and Pedagogy I (1) Develops practicaland pedagogicalknowledgeofflute,singlereed,anddoublereed instrumentswithemphasisonperformingskills.Coversunderstanding and application of variousfacets of woodwind playing. Prerequisite: Music major or minor or permission of instructor.
MUS 263 Brass Techniques and Pedagogy I (1) Develops practical knowledgeofthefourmajorbrassinstrumentswithemphasisonperformingskills.Coversunderstandingandapplicationofvariousfacets of brass playing. Prerequisite:Music majoror minor or permission of instructor.
MUS 264 Percussion Techniques (1) Develops practical and pedagogical concepts ofthemajororchestralandworld percussioninstruments through performance and listening activities. Prerequisite: Music major or minor or permission of instructor.

MUS 265 String Techniques and Pedagogyl(1) Develops proficiency inonestringinstrumenteachsemester.Emphasisonheterogeneous classroomteachingtechniquesforbeginningstringstudents.Prerequisite: Music major or minor or permission of instructor.
MUS 270 Teaching Music in the Elementary School (3) Presents non-musiceducatorswithinformationandskillsforintegratingmusic fundamentals into the regular elementary classroom. Emphasizes pedagogicalandmusical performancewithinthestudyand practice of music education as well as the importance of music for developmentalimprovementinotheracademicareas.Prerequisite:Education 100.

MUS 271 Practicum in School Music Experiences (2)
MUS 272 Woodwind Techniques \& Pedagogy II (1)
MUS 273 Brass Techniques and Pedagogy II (1)
MUS 275 String Techniques and Pedagogy II (1) Develops proficiency in one string instrument. Emphasis on heterogeneous classroomteachingtechniquesforbeginningstringstudents.Prerequisite: Music majors of minors or permission of instructor.
MUS 286 Approaches and Materials in Music Therapy Practice (3) Examines the American Music Therapy Association Standards of Practice and the implementation of various treatment strategies in musictherapy.Developsabilityto writetreatment plans,implement structuredmusictherapysessions,anddocumentprogress.Prerequisite:MUS 184 or permission of instructor. Students mustearnagrade of C- or better.
MUS 287 Music Therapy Practicum (1) This course provides clinical training at various treatment facilities throughout the city. All trainingconductedunderthesupervision ofaqualifiedmusicaltherapist. A grade of $B$ - or better must be earned. This course is one of the six practicathat mustbecompleted beforestudent is eligibleto begina full-timeinternship.Opentomusictherapymajorsonlyandnotopen to first-semester freshman. This course can be repeated only once.
MUS 288 Music Therapy Practicum (1) This course provides clinical training at various treatment facilities throughout the city. All training conductedunderthesupervision ofaqualifiedmusicaltherapist. A grade of $B$ - or better must be earned. This course is one of the six practicathatmustbecompleted beforestudent is eligibleto begina full-timeinternship.Opentomusictherapymajorsonlyandnotopen to first-semester freshman. This course can be repeated only once.
MUS 300 Recital Attendance (0) This course exposes students to a variety of musical styles and artistic interpretations through attendance at concerts and recitals. Students will attend a minimum of 15 performanceseachsemesteraccordingtotheguidelinesestablishedin theMusic Student Handbook and completeattendance verification for each. No prerequisite. Pass/fail.

MUS 301 Recital Attendance (0) This course exposes students to a variety of musical styles and artistic interpretations through attendance at concerts and recitals. Students will attend a minimum of 15 performanceseachsemesteraccordingtotheguidelinesestablishedin theMusicStudentHandbookand completeattendanceverification for each. No prerequisite. Pass/fail.
MUS 310 University Bands (1) (Section 1) Includes the finest wind andpercussionstudentswithinandoutsidetheDepartmentofMusic. Presentsseveralconcertseachsemesterfeaturingadvancedlevelmusic andservesasoneofthetouringensembles.Studentsalsoparticipate in University Band and Aces Brass as part of this course. Audition requiredeachsemesterforentranceandseating placement. (Section 2) Presents a concerteach semester.Smallergroups from withinUniversityBandmakeupAcesBrass,which performsathomebasketball games and MVC and NCAA tournaments. Open to music majors and non-majors. No audition required; seating at discretion of director.
MUS 313 Jazz Ensemble (1) (Section 1: Big Band) Full size band, performs on campus each semester. Other activities include performances with guestartists, jazzfestivals, and regionaltours. Audition required. (Section 2: Lab Band) Full size band, performs on campus each semester. Audition not required.
MUS 314 Saxophone Ensemble (1)
MUS 315 Clarinet Ensemble (1)
MUS 316 Woodwind Chamber Ensemble (1)
MUS 317 Flute Ensemble (1)
MUS 318 Small Jazz Ensemble (1)
MUS 319 Guitar Ensemble (1)
MUS 320 University Symphony Orchestra (1) Select 60 member ensemblethatpresentsseveralconcertseachsemesterfeaturingstandard orchestral repertoire. Open to both music majors and non-majors from across the University community. Audition required.
MUS 322 String Chamber Ensemble (1)
MUS 325 Brass Ensemble (1)
MUS 327 Percussion Ensemble (1)
MUS 330 University Choir, Women Chorus, and Mixed Choir (1) (Section 1: University Choir) Composed of the finest vocal talent on campus, this choir has built a reputation for performances of major choral-orchestralmasterworks,acappellamusic, partsongs,andspirituals.Ithastouredextensively.Auditionrequired.Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities. (Section 2: Women's Chorus) Presents a choral concert each semesterand participates intheannual Holiday Pops concert.Some musical/choralbackgroundandabriefauditiontoassesspitch-matching ability is required. Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities. (Section 3: Mixed Choir) A large choir for men and women from across campus, this choir focuses on a variety of choral music and choral styles in the traditional SATB format. Typically, Mixed Choir performs on programs alongside Women's Chorus, but also joins with University Choir for large works for soprano, alto, tenor, and bass voices. Brief audition required. Repeatable course. Content changes each time course is offered. Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities.
MUS 332 Kantorei (1) Explores vocal chamber repertoire with specificemphasisonsixteenthandearlyseventeenthcenturymadrigals and motets. Audition and concurrent enrollment in MUS 130-430 section 01 (University Choir) required.

MUS 336 Introduction to Improvisational Methods (2) Introduces
studentstoproperplayingtechniqueonselectedorchestral percussion instruments, hand-held percussion, andethnicinstruments.During thecourseofthesemesterstudentswilldevelopproperplayingskills and techniques. Facilitation abilities used in clinical music therapy improvisationwillbeexploredanddevelopedusingpercussion, keyboard, or other media improvisation exercises. Prerequisite: Music Therapy major, completion of MUS 286 and MUS 288, or permission of instructor. Students must earn a grade of C- or better.
MUS 338 Opera Main Stage (1) Emphasis on broadening knowledgeandskillsthroughstudiesand performancesofextendedopera scenes,full-lengthoperaproductions,orotherpublicperformances of repertoire.
MUS 339 Keyboard Accompanying (1) Instruction in the technique andartofmusical collaborationonthepiano,organandharpsichord.

MUS 340 Counterpoint (3) Study of Baroque counterpoint, with an emphasison model composition. Topics includefiguration prelude, continuous variation, chorale prelude, invention, andfugue. Prerequisite: MUS 241 or permission of instructor.
MUS 341 Jazz Arranging (2) Covers rudimentary techniques associated with the art of arranging jazz music. Introduces two- and three-part writing techniques for the traditional jazz combo and fundamentalsofrange, transposition, lowintervallimits, and performance variants. Prerequisites: MUS 105, 142, and 243 or by permission of instructor.

MUS 343 Form and Analysis (3) A detailed analytical study of a wide variety of musical compositions and forms, ranging from Gregorian Chant to 21st century music. Prerequisite: MUS 242 or permission of instructor.
MUS 346 Orchestration (2) Covers the instruments of the symphony orchestra, theirrangesandtranspositions, andtechnical capabilities. Includes transcriptionfromothermediatoorchestral combinations. Prerequisite: MUS 242 or permission of instructor.
MUS 350 Conducting I (3) fundamentals of conducting techniques, score reading, and score study. Students will conduct excerpts from traditionalwind, choral, and orchestral repertoire.Prerequisite:MUS 241or permission of the instructor.
MUS 351 Conducting II (2) fundamentals of conducting techniques, score reading, and score study. Students will conduct excerpts from traditionalwind, choral, and orchestral repertoire. Prerequisite:MUS 241 or permission of the instructor.
MUS 355 History of Music I (3) A detailed study of the history of music in Western civilization. Focuses on development of musical style and language, resources and technology used by musicians, changing role that music and musicians played in Western culture, and ways in which music and musical life reflected social and politicaldevelopmentsduringdifferenthistoricaleras.Prerequisite:Music major or permission of instructor.
MUS 356 History of Music II (3) A detailed study of the history of music in Western civilization. Focuses on development of musical style and language, resources and technology used by musicians, changing role that music and musicians played in Western culture, and ways in which music and musical life reflected social and politicaldevelopmentsduring differenthistoricaleras.Prerequisite:Music major or permission of instructor.
MUS 357 Topics Music History \& Culture (3) These courses will explore various topics within music history. Whether the topic is the music of a certain composer, specific region, time period, or cultural practice, the classwilltakeaninterdisciplinaryapproach tothestudy ofmusichistory.Thecoursewilloftenincludeahands-oncomponent that will involve a project engaging with the public, working with
organizations such as local museums, libraries, or concert venues. This will be a discussion-based course with daily reading and listen-ing,alongwithseveralwritingassignmentsandpotentialmulti-media projects (presentations, websites, videos) throughout the semester. Content changes each time course is offered. Repeatable.
MUS 360 Suzuki Pedagogy III (2) Continuation of the study of the p Suzuki Talent Education violin method units begun in MUS 260 and 261. Violinists only after volume four. Prerequisites: MUS 261, or permission of the instructor.
MUS 361 Suzuki Pedagogy IV (2) Continuation of the study of the Suzuki Talent Education violin method units begun in MUS 260 and 261. Violinists only after volume four. Prerequisite: MUS 261, or permission of the instructor.
MUS 366 Introduction to Music Therapy Improvisation (1) Introduces techniques and develops facilitation skills used in improvisation withemphasis on percussion, guitar, keyboard, or mixed media improvisation exercises. Prerequisites: MUS 184, or permission of instructor.
MUS 370 Elementary Methods and Materials in General Music (3) Focuses on procedures and instructional materials used in teaching generalmusicintheelementaryschool.Developspedagogicalskills in singing, playing, movement and creative exploration. Applies the teaching methods of Dalcroze, Kodaly, Orff and other approaches. Prerequisite: MUS 142 or permission of instructor.

MUS 371 Secondary Methods and Materials in General Music (3) Examinestheoretical, performance, pedagogical,technologicaland integrative skills applied in secondary music education. Introduces strategiesforteachinganddesigning both performingandnon-performingmusiccourses.Investigates approachestocurriculumdevel-opment,computer-assistedinstruction, assessmentofstandardsand lesson planning. Prerequisite: MUS 142 or permission of instructor.
MUS 372 Methods and Materials in Instrumental Music (3) Focuses on directing, organizing and maintaining a quality choral program at the secondary level. Addresses necessary principles, skills and issuesconducivetosuccessfulteaching andadministrating. Provides opportunitiestodevelopteachinganddirectingskills, to reviewand synthesizerelevantliteratureandtofurtherpersonalgrowthand professional preparation.Prerequisites:MUS 142,350;PianoProficiency Il exam; or permission of instructor.
MUS 373 Methods and Materials in Instrumental Music (3) Focuses on directing, organizing, and maintaining a quality band and string programatthesecondarylevel.Addressesnecessaryprinciples,skills, andissuesconductivetosuccessfulteachingandadministrating.Providesopportunitiestodevelopteachinganddirectingskills,toreview andsynthesizerelevantliterature,andtofurtherpersonal growthand professional preparation. Prerequisites:MUS 142,350;orpermission of instructor.
MUS 374 Piano Pedagogy (1) The study of teaching methods and survey of current materials.
MUS 375 Piano Pedagogy (1) The study of teaching methods and survey of current materials.
MUS 384 Receptive/Compositional Methods in Music Therapy (3) Introducesreceptiveandcompositionalmethodsusedinmusictherapyclinical practice, including song discussion, song writing, movement to music, and music and imagery. Verbal facilitation skills and guidelines for ethical clinical practice will be included. Prerequisite: MUS 286, junior or senior standing, or permission from the instructor. Students must earn a grade of C - or better.

MUS 386 Psychology of Music (3) Examines the psychoacoustical
parameters of music; the perception of melody, harmony, rhythm and form; the effect of music on physical, emotional, and spiritual dimensionsofhealth;musicpreferenceandability;neurophysiology and musical behavior; and measurement and evaluation of musical behavior. Prerequisite: MUS 286, junior or senior standing, or permission of the instructor. Students must earn a grade of C - or better.
MUS 387 Music Therapy Practicum (1) This course provides clinical training at various treatment facilities throughout the city. All training conductedunderthesupervision ofaqualifiedmusicaltherapist. $A$ grade of $B$ - or better must be earned. This course is one of the six practica that mustbecompleted beforestudent is eligible to begina full-timeinternship.Opentomusictherapymajorsonlyandnotopen to first-semester freshman. This course can be repeated only once.
MUS 388 Music Therapy Practicum (1) This course provides clinical training at various treatment facilities throughout the city. All training conductedunderthesupervision ofaqualifiedmusicaltherapist. A grade of $B$ - or better must be earned. This course is one of the six practicathat mustbecompleted beforestudent is eligibleto begina full-timeinternship.Opentomusictherapymajorsonlyandnotopen to first-semester freshman. This course can be repeated only once.
MUS 390 Music Management Internship (1) Practical experience in musicmanagementinternshipposition.Prerequisite:Juniorstanding, music management major or permission of the instructor.
MUS 391 Music Business Opportunities (2) Overview of professions inthemusicmanagementbusiness.Includesguestlecturesfromprofessionals in different fields of music management. Projects include research paper or presentation in an area of interest and mock job application.Prerequsites:Sophomorestanding;musicmanagement major; ECON 101, 102; MUS 142; or permission of instructor.
MUS 392 Introduction to Music Business and Technology (3) Overview of current trends relating to music business and music technology. Requires hands-on training of computer software application programs including, butnotlimited to, sequencing, music notation, interactive applications and office applications. Prerequisites: MUS 142; QM 160; or permission of instructor.
MUS 398 Independent Study (1) Individual research and study in special areas. Project and amount of credit to be earned must have approval of Department of Music

MUS 400 Recital Attendance (0) This course exposes students to a variety of musical styles and artistic interpretations through attendance at concerts and recitals. Students will attend a minimum of 15 performanceseachsemesteraccordingtotheguidelinesestablishedin theMusic StudentHandbook and completeattendance verification for each. No prerequisite. Pass/fail.
MUS 401 Recital Attendance (0) This course exposes students to a variety of musical styles and artistic interpretations through attendance at concerts and recitals. Students will attend a minimum of 15 performanceseachsemesteraccordingtotheguidelinesestablishedin theMusic StudentHandbook and completeattendance verification for each. No prerequisite. Pass/fail.

MUS 410 University Bands (1) (Section 1) Includes the finest wind and percussionstudentswithinandoutsidetheDepartmentofMusic. Presentsseveralconcertseachsemesterfeaturingadvancedlevelmusic andservesasoneofthetouringensembles.Studentsalso participate in University Band and Aces Brass as part of this course. Audition requiredeachsemesterforentranceandseating placement. (Section 2) Presents a concerteach semester.Smallergroups from withinUniversity Bandmakeup Aces Brass, which performsathomebasketball games and MVC and NCAA tournaments. Open to music majors and non-majors. No audition required; seating at discretion of director.

MUS 413 Jazz Ensemble (1) (Section 1: Big Band) Full size band, performs on campus each semester. Other activities include performances with guestartists, jazzfestivals, and regionaltours. Audition required. (Section 2: Lab Band) Full size band, performs on campus each semester. Audition not required.
MUS 414 Saxophone Ensemble (1)
MUS 415 Clarinet Ensemble (1)
MUS 416 Woodwind Chamber Ensemble (1)
MUS 417 Flute Ensemble (1)
MUS 418 Small Jazz Ensemble (1)
MUS 419 Guitar Ensemble (1)
MUS 420 Symphony Orchestra (1) Select 60 member ensemble that presentsseveralconcertseachsemesterfeaturingstandardorchestral repertoire. Open to both music majors and non-majors from across the University community. Audition required.

MUS 422 String Chamber Ensemble (1)
MUS 425 Brass Ensemble (1)
MUS 427 Percussion Ensemble (1)
MUS 430 University Choir, Women Chorus, and Mixed Choir (1) (Section 1: University Choir) Composed of the finest vocal talent on campus, this choir has built a reputation for performances of major choral-orchestralmasterworks,acappellamusic, partsongs,andspirituals.Ithastouredextensively.Auditionrequired.Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities. (Section 2: Women's Chorus) Presents a choral concert each semester and participates in the annual Holiday Pops concert.Some musical/choralbackgroundandabriefauditiontoassesspitch-matching ability is required. Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities. (Section 3: Mixed Choir) A large choir for men and women from across campus, this choir focuses on a variety of choral music and choral styles in the traditional SATB format. Typically, Mixed Choir performs on programs alongside Women's Chorus, but also joins with University Choir for large works for soprano, alto, tenor, and bass voices. Brief audition required. Repeatable course. Content changes each time course is offered. Section placement for MUS 130-430 is at the discretion of the Director of Choral Activities.
MUS 432 Kantorei (1) Explores vocal chamber repertoire with specificemphasisonsixteenthandearlyseventeenth centurymadrigals and motets. Audition and concurrent enrollment in MUS 130-430 section 01 (University Choir) required.
MUS 438 Opera Main Stage (1) Emphasis on broadening knowledgeandskillsthroughstudiesandperformances ofextendedopera scenes,full-length operaproductions,orotherpublicperformances of repertoire.
MUS 439 Keyboard Accompanying (1) Instruction in the technique andartofmusicalcollaborationonthepiano,organandharpsichord.

MUS 451 Literature of the Applied Major (2) Survey of instrumental orvocalliterature.Offeredforpiano,organ, harpsichord,harp, guitar, voice and all orchestral instruments. Prerequisite: Permission of the instructor.

MUS 460 Suzuki Pedagogy V (2) Study of advanced techniques and literature of Suzuki violin method and supervised teaching in the University of Evansville Suzuki Talent Education Violin Program. Prerequisites: MUS 361.
MUS 461 Suzuki Pedagogy VI (2) Study of advanced techniques and
literature of Suzuki violin method and supervised teaching in the University of Evansville Suzuki Talent Education Violin Program. Prerequisites: MUS 361.

MUS 474 Pedagogy of the Applied Major (2) Survey of pedagogical literature and techniques. Offered for voice and all orchestral instruments. Prerequisite: permission of the instructor.

MUS 476 Marching Band Techniques (2) Examines characteristics, techniques and fundamentals of marching band. Emphasizes drill designviacomputer-assistedcharting.Observationand participation activities required with local high school marching bands. Prerequisite: MUS 373 or permission of instructor.

MUS 478 Student Teaching in Music (5) Observing and teaching dailyundersupervision ofthecriticteacherandUniversitysupervisor for a period ofeightweeks. This studentteaching experience is to be in conjunction with MUS 479. It may be in a different area of music education

MUS 479 Student Teaching in Music (6) Observing and teaching daily undersupervision ofthecriticteacherandtheUniversity supervisor for the length of semester.
MUS 486 Music Therapy Research (4) Presents an overview of quantitativeandqualitativeresearchmethodsusedinmusictherapy. Includes methods to critically review music therapy research and incorporate research findings into clinical practice. Culminates with the creation of an individual research project proposal. Prerequisite: MUS 286 or permission of instructor. Students must earn a grade of C- or better.

MUS 487 Music Therapy Practicum (1) This course provides clinical training at various treatment facilities throughout the city. All trainingconductedunderthesupervision ofaqualifiedmusicaltherapist. A grade of $B$ - or better must be earned. This course is one of the six practicathatmustbecompleted beforestudent is eligibleto begina full-time internship.Opentomusictherapymajorsonlyandnotopen to first-semester freshman. This course can be repeated only once.
MUS 488 Music Therapy Practicum (1) This course provides clinical training at various treatment facilities throughout the city. All training conducted under the supervision of a qualified music therapist. A grade of $B$ - or better must be earned. This course offers additional training or a unique learning opportunity beyond the required six courses. It must be completed before student is eligible to begin a full-time internship. Open to upper level music therapy majors only. This course cannot be repeated.
MUS 493 Concepts of Organ Design I (1) Survey of pipe organ designandhistoryspecificallyastheyrelatetostylisticallyappropriate performance. Prerequisite: Permission of the instructor.
MUS 494 Concepts of Organ Design II (1) Survey of pipe organ designandhistoryspecificallyastheyrelatetostylisticallyappropriate performance. Prerequisite: Permission of the instructor.

MUS 495 Servc Playing/Improvisation I (1) Practical skills for the church organist: hymn playing, chant accompaniment, anthem accompaniment,score reading, conducting from the console and improvisation. Prerequisite: Permission of the instructor.
MUS 496 Servc Playing/Improvisation II (1) Practical skills for the church organist: hymn playing, chant accompaniment, anthem accompaniment, score reading, conducting from the console and improvisation. Prerequisite: Permission of the instructor.
MUS 498 Seminar in World Music (3) Senior capstone course. Concentrates on music beyond that of the Western art music tradition. Discussion centers on music and musical cultures of diverse regions oftheworldandeach studentfocusesononespecificregionforclass presentation and a seminar paper. Prerequisite: FYS 112.

MUS 499 Music Workshop (1) Presents special topics workshops in various specific areas of music. Instruction by University faculty may be augmented by outstanding authorities in the field. Prerequisite: Permission of the instructor.

## Neuroscience (NEUR)

Neuroscience courses are taught by faculty in the Departments of Biology, Chemistry, or Psychology that have advanced training and study in neuroscience.
NEUR 125 Introduction to Neuroscience (3) Surveys development, organization, andfunction ofthehuman brain and nervous systemhowwesense,move,feel,andthink.Introducesneuralbases ofmood, emotion,sleep,learning, memory,language, andattention.Assumes minimal prior knowledge of biology, physics, and chemistry.
NEUR 126 Neuroscience Techniques (2) The aim of this course is to providestudentswithexperiencewithlaboratorytechniques,experimental paradigmsandreal-lifeexposuretotheconceptsandresearch findings in Neuroscience. Prerequisite/Corequisite: NEUR 125. Fall.
NEUR 355 Sensation and Perception (3) Examines perceptual processing of sensory information in vision, hearing, touch, taste, and smell.Examines psychophysics and the influence of personality and environmental factors in human perception. Examines neuropsychologyand perceptualabnormalities resulting frombraindamage. Prerequisites: NEUR 125 and PSYC 121. Spring.
NEUR 357 Neuropsychology (3) Examines the function and organization of the nervous system and the role of the nervous system in controlling behavior. Topics include nervous system structure and functionsasitrelatestosensory processing, movement,sleep,reproductive behavior, emotional behavior, learning and memory, stress and health, neurological disorders, and select psychiatric disorders. Current research methodology and experimental findings emphasized. Prerequisites: BIOL 100 or higher; PSYC 121. Fall.
NEUR 358 Neuropsychology Lab (1) Laboratory course introduces techniquesand paradigmsofphysiological psychologyandbehavioral neuroscience.Scientificreportwriting, problems ofresearchdesign, and data analysis emphasized. Two-hour laboratory. Prerequisites: NEUR 125 and PSYC 121. Fall.
NEUR 360 Neuropharmacology (3) Topics include how drugs affect the human nervous system at molecular, cellular, system and behavioral levels. This includes interactions of neurotransmitters, neuropeptides, neurohormones,neuromodulators,enzymes,second messengers, co-transporters, ion channels, and receptor proteins in the central and peripheral nervous systems. Pharmacological treat ofneurologicaldisordersincludingpain, neurodegenerativediseases, psychological disorders, and addiction are examined. Prerequisite: NEUR 125. Fall
NEUR 411 Molecular Neuroscience (4) Lectures cover the molecular andcellularbasis ofnervoussystemfunction.Topicsinclude:electrophysiology, passiveandactive properties ofthemembrane, synaptic transmission, commonintracellularsignaling pathways, neuralinduction, axonguidance,synaptic developmentsensation,motorfunction, andmemory.Thelabsectioninvolvesgeneexpressionanalysis, from primerdesignto real-time polymerasechain reaction. Prerequisites: NEUR 125 and BIOL 107 or BIOL 119 are required. Recommended: PHYS 122 or PHYS 211. Fall.
NEUR 479 Research in Neuroscience (0-3) Involves participation in the planning, designing, running, analyzing and presenting of a research project under the direct supervision of a faculty member. A written and oral report of the literature search and laboratory work is required. The projectmust be approved by the proper Ethics Committee (IRB for human studies, IACUC for animal studies)
to receive credit. Content changes each time the course is offered. Course may be repeated up to 6 credit hours. Prerequisite: NEUR 125. Fall, spring.

NEUR 489 Internship in Neuroscience (0-3) Involves participation in an internship while under the direct supervision of professional personnel.Weeklyclassdiscussionsfocusonexperiencesand professional developmentissues.A writtenreportincludingasummaryofthefield ofNeuroscienceinwhichtheinternshipoccurred, workaccomplished during the semester and learning experiences gained during the semester is required. The internship must be approved by the Director of the Neuroscience Program to be able to enroll. Course may be repeated up to 6 credit hours. Prerequisite: NEUR 125. Fall, spring.

NEUR 499 Special Topics in Neuroscience (1-3) Lectures, seminars or discussions of topics not covered in regular course offerings. Provides an opportunity to engage in topics of special interests within the broad field of neuroscience. Course is repeatable up to 6 credit hours. Contentchangeseachtimethecourseis offered. Prerequisite: NEUR 125.

## Nursing (NURS)

Nursing courses are taught by the faculty of the Dunigan Family School of Nursing.
NURS 165 Survey of Professional Nursing (3) Introduction to the roleof the nurse withintheframework oftheDungan nursingmodel of Dynamic Integration. Explores historical, social, legal, ethical, and research components ofprofessionalnursingpractice(3clockhours).
NURS 170 Therapeutic Relationships (3) Provides beginning knowledge of nursing modalities used to facilitate health. Specific modalities include supportive counseling, teaching, social support, and alternativecare.Opportunitiestousenursingmodalities mayinclude simulations and interviews with healthy people (3 clock hours).
NURS 261 Fundamentals of Professional Nursing (3) Focuses on the promotion of healthy physiological responses and the provision of a safeenvironment forhealthy and vulnerable individuals (3 clock hours). Prerequisites: EXSS 112, 113; CHEM 108. Corequisite: NURS 262. Fall.
NURS 262 Clinical Component of Fundamentals (3) Clinical laboratoryincludesinstructionand practiceinmodalitiestoprovideasafe environmentandpromotehealthyphysiologicalresponsesforhealthy and vulnerable adults. Focus is on the modality of direct care (6clock hours). Prerequisites: EXSS 112, 113; CHEM 108. Corequisites: NURS 261. Fall.
NURS 264 Physical Assessment With Lab (3) Class component for NURS 264 Physical Assessment with lab. Introduces the assessment of health within the Dungan Model of Dynamic Integration (developmental,cultural, physiologicalcognitive,psychological,behavioral,spiritual, andsocialsupport).Focusisonassessmentofindividuals and families across the life span. Practice component provided(3lab hours, 5 clock hours). Prerequisites: EXSS 112, 113; CHEM 108 or 118 or admission to the RN to BSN program.

NURS 271 Healthy Families Across the Lifespan (3) Focuses on the lifecycleofahealthyfamilybeginning atconception.Addressesfamilydevelopment, maternitycare,transitions, and common problems of healthy families (3 clock hours). Prerequisites: NURS 160 or 165, 261, 262, 264; BIOL 110; NUTR 304. Corequisite: NURS 272. Spring.
NURS 272 Clinical Component of Healthy Families (3) Clinical laboratoryincludesinstructionand practiceinthemodalitiesofdirect care, teaching, counseling, alternative care, and social support in
healthy families. Focus on clients and families of all ages, especially childbearing, child rearing, and aging family (9 clock hours). Prerequisites: NURS 160 or 165, 261, 262, 264; BIOL 110; NUTR 304. Corequisite: NURS 271. Spring.
NURS 351 RN to BSN Transitions to Professional Nursing (6) Provides overviewofthephilosophy ofbaccalaureatenursingeducation and role of the nurse within the framework of the Dungan Nursing Model of Dynamic Integration. Guides the RN student with unique life and work experiences to conceptualize changes in professional nursing roles. Topics include caring interaction in nursing, nursing process, health promotion and maintenance, health care delivery system, nursingtheory,learningtheories, andcontemporarynursing. Provides forum for discussion of changing perceptions and dimensions of professional nursing(6clockhours).Prerequisite:Admission to RN to BSN Program.
NURS 361 Medical Surgical Nursing I (3) Focuses on vulnerable individuals and families across the life span with an emphasis on pediatric clients, who are in transition due to their responsestocom-monillness-relatedphenomenasuchaspain,inflammation,infection, neoplasia, alteredimmunity, surgicalintervention,orfluid/electrolyte imbalances,accidentsand poisoning, gastrointestinaldisorders,congenital and developmental disorders (3 clock hours). Prerequisites: All 100-and 200-level nursing courses; HS 205. Corequisite: NURS 362. Fall.

NURS 362 Clinical Component of Adult and Pediatric Medical Surgical Nursing I (2) Clinical laboratory includes instruction and practicewiththemodalities ofdirectcare,teaching, counseling, alternative care, social support in persons or families in transition related to their responses to common illness-related phenomena. Primary focus is on pediatric and surgical clients including their families (6 clock hours). Prerequisites: All 100-and 200-level nursing courses; HS 205. Corequisite: NURS 361. Fall.
NURS 363 Mental Health Nursing (3) Focuses on individuals and their families who are vulnerable or in transition due to acute or chronicmentalhealthproblemssuchasmoodandthoughtdisorders, anxietydisorders,substanceabuse,andmanipulativeorangrybehavior (3 clock hours). Placement: Junior. Prerequisites: All 100- and 200-level nursing courses; HS 205. Corequisite: NURS 364. Fall.
NURS 364 Clinical Component of Mental Health Nursing (2) Clinicallaboratoryincludesinstructionand practicewiththemodalities of counseling,teaching, andsocialsupportwithindividualsandgroups. Focuses on the client and family with acute or chronic problems in mental health ( 6 clock hours). Placement: Junior. Prerequisites: All 100- and 200-level nursing courses; HS 205. Corequisite: NURS 363. Fall.

NURS 369 Strategies for Professional Nursing Practice I (1) This coursefocuses on the development oftesttaking skills and preparation for the NCLEX exam. Evaluations will be completed to allow fordevelopmentofindividualspecificinterventionsforimprovement. Prerequisite: Completion of 200-level nursing courses.
NURS 371 Medical Surgical Nursing II (3) Focuses on vulnerable individuals and families across the life span who are in transition related to common illnesses causing alterations in fluid and gas transport, metabolism, digestion, and elimination (3 clock hours). Prerequisites: NURS 361, 362, 363, 364. Corequisites: NURS 373, 374. Spring.

NURS 373 Medical Surgical Nursing III (3) Focuses on vulnerable individuals and families across the life span who are in transition related to commonillnesses causingalterationsin reproductionand sexuality, cognition, sensation and motion, and immunity (3 clock hours). Prerequisites: NURS 361, 362,363, 364. Corequisites: NURS

371, 374. Spring.
NURS 374 Clinical Component Medical Surgical Nursing II and III (4) Clinical laboratory includes instruction and practice with modalities ofdirectcare,teaching, counseling, alternativecare,social support in persons or families in transition related to disruptions of energy and protection ( 12 clock hours). Prerequisites: NURS 361, 362, 363, 364. Corequisites: NURS 371, 373. Spring.
NURS 385 Research and Evidence-Based Practice in Nursing (3) Extendsfocusonevidence-based practicebyexaminingthespecific roleofresearchinthedevelopmentofthebodyofnursingknowledge. Primary emphasis on the nurse as a consumer of research findings (3 clock hours). Prerequisite: Statistics.
NURS 395 Special Topics in Health Care and Nursing (1) Specific health care and nursing topics. Classroom and experiential learning experiences appropriate.
NURS 463 Leadership and Management in Professional Nursing (3) Focuses onthe principles ofleadership andmanagementastheyare practicedinnursing. Concepts oforganizational behaviorandtransformationandtransactualleadershipareemphasizedalongwithclient advocacy,changeagency, power,and politics. Prerequisite:Completion of all junior level courses or admission to the RN to BSN option.

NURS 467 Global Health Nursing (3) Focuses on individuals,families, and groups within the community. Emphasis on vulnerable populations, theirhealth, and the provision of health care. Examines health ofthe community including communicabledisease,environmentalhealthhazards,mortalityandmorbidity, andepidemiology (3 clock hours). Placement: Senior. Prerequisites: All 300-level nursing courses or admission to the RN to BSN program. Corequisite: NURS 468.

NURS 468 Clinical Component of Global Health Nursing (4) Clinical laboratory includes instruction and practice with the modalities ofteaching, counseling, alternative care, and social support.Focuses onvulnerablegroupswithinthecommunitywhorequirehealth promotion and/or suffer chronicity. Primary emphasis on teaching and social support (12 clock hours). Prerequisites: All 300-level nursing courses or admission to the RN to BSN program. Corequisite: NURS 467.

NURS 469 Strategies for Success in Professional Nursing (2) Prepares the student for the NCLEX Examination by reviewing test taking skills,testquestionformats, and essential knowledgeforprofessional nursing practice. Corequisite: NURS 477, 478.
NURS 474 Clinical Component of US Public Health (2) This clinical laboratorycourseincludesinstructionand practice withmodalities of teaching, counseling,alternativehealth, andsocialsupport.Thefocus is on vulnerable groups within the community who require health promotionand/orsufferchronicity.Primaryemphasis isonteaching and social support in a community setting. Required of senior students who take NURS 477 and NURS 478 at Harlaxton.

NURS 477 Complex Medical Surgical Nursing (3) Focuses on individuals and families who are in transition due to complex acute or chronicillnessproblemswhichincreasesusceptibilitytomulti-system failure (3 clock hours). Prerequisites: All 300-level nursing courses or admission to the RN to BSN program. Corequisite: NURS 478.

NURS 478 Clinical Management of Complex Clients (4) Clinical laboratory includes instruction and practice with modalities necessary to promote reintegration in individuals and families with complex acute or chronic illness problems. Clinical experiences include opportunitiesforpracticeindirectcareandleadershiproles(12clock hours). Prerequisites: All 300-level nursing courses or admission to the RN to BSN program. Corequisite: NURS 477.

NURS 484 Professional Nursing Senior Seminar (3) Societal and global healthissues criticallyexamined withemphasisontheimpact on individual consumers, health care providers, and society as a whole.Focuseson refining problemsolvingskills, usingthestudent's liberal and professionaleducation.Scholarly presentationrequired (3 clockhours).Prerequisites:All300-levelnursing coursesoradmission to the RN to BSN program.

## Nutrition (NUTR)

Nutrition is taught by the faculty of the Dunigan Family School of Nursing.
NUTR 304 Nutrition Concepts and Controversies (3) Focuses on basic nutrient requirements and how they are used by the human body throughout the life cycle. A holistic approach with emphasis on physiologicalfactorsinfluencingeating habits (social,economic, cultural,etc.).Currentcontroversiesinthefield ofnutritiondiscussed andclassactivitiesarecoordinatedtostimulatethoughtandjudgment on selected topics. Provides a basic understanding of nutrition for applicationtoone'sownlifestyle.Meetsthegeneraleducationhealth and wellness requirement. Fall and Spring.

## Organizational Leadership (OL)

Organizational leadership courses are taught by instructors in affiliation with the Center for Adult Education staff. Course credits apply onlytotheorganizationalleadership degreeprogram.Enrollmentis limitedtostudentsadmittedtotheOrganizationalLeadershipdegree program.
OL 300 Adult Learner (3) Introduction of characteristics, theories, and practices of adult development and learning. This courseexamines basic assumptions about producing competent, flexible adults who are able to apply knowledge in a changing environment.
OL 310 Applied Leadership (3) Introduction to fundamental concepts ofleadership.Emphasizessupervisor'sroles,fostering relationships, and motivating and empowering others.
OL 311 Quantitative Skills for Leadership (3) Emphasizes critical thinkingaboutnumericaldata:percentages, ratios,solvingequations, computing and interpreting means, medians, modes, and standard deviations.
OL 312 Human Behavior in Organizations (3) Study of social and psychological factors that influence the supervision of groups and individuals in work settings.
OL 320 Persuasive Written and Oral Communication (3) Emphasis on developing and refining practical written and oral presentation skills. Writing intensive course.
OL 321 Principles and Issues of Human Resources (3) Study of theories, principles, and practices involvedinorganizing,supervising, and leadingothers.Emphasisoncommunication,motivation,leadership, evaluation, and compensation of human capital.
OL 322 Leadership Ethics (3) Survey of controversial issues, dilemmas, and quandariesencounteredincontemporarysociety.Emphasizesfundamentalnormsofconductinorganizationandethicalissues thataffectthem, includingemployee-employerrelations, consumer advertising, and the environment.
OL 330 Supervision (3) Development of essential supervisory skills by increasing the students' thinking and knowledge to application. Considers the unique challenges of the 21st century.
OL 350 Leadership Practicum (3) Emphasizes practical application of concepts, theories, and practices of leaders. Students design and implement a problem-solving research project through integration with priorand concurrentcoursework. Includesclass presentations,
simulations that combine knowledge and skill.
OL 360 Leadership Practicum (3) Emphasizes practical application of concepts, theories, and practices of leaders. Students design and implement a problem-solving research project through integration with priorand concurrent coursework. Includes class presentations, simulations that combine knowledge and skill.
OL 370 Leadership Practicum (4) Emphasizes practical application of concepts, theories, and practices of leaders. Students design and implement a problem-solving research project through integration with priorand concurrent coursework. Includesclass presentations, simulations that combine knowledge and skill.
OL 410 Leadership: Conflicts and Change (3) Examines impact of conflict,stress, andchangeinorganizations.Emphasizes ability ofan organizationtomonitoritselftodetermineneedforchangeinappropriate areas. Participants examine effective change strategies.
OL 411 Leadership: Strategic Decision Making (3) Study of best practicesindecision-making.Approachestoleadershipsuchaspow-er-influence, situational factors, individual traits, and behaviors are exploredasmodelsofdecision-makingtheory.Students requiredto apply decision-making strategies throughout course.
OL 412 Customer Development and Leadership (3) Fundamentals of developing a strong customer base. Emphasis on methods, tools, skills, and techniques required to develop, manage, and market to customers. Considers both external and internal customers.
OL 420 Global Issues Seminar (3) Studies issues involved in living and working in a global environment. Explores topics such as ethics, social responsibility, law, and technology in the international arena.
OL 421 Organizations: a Strategic Approach (3) Principles of planning,organizing, directing, andcontrollingthemanagement process. Models,simulations,andcasestudiesusedtodevelopskills insetting goals.
OL 422 Leadership: Individual and Team Processes (3) Examines teamprocessandleadershipincludingteamdevelopment, theimportance and challenge of team member diversity, maximizing team creativity, problem-solving,handlingteamconflict,andrevitalizinga passiveorcomplacentteam.Alsoemphasisonleadingandmanaging virtual teams and the unique differences.
OL 450 Leadership Practicum (4) Emphasizes practical application of concepts, theories, and practices of leaders. Students design and implement a problem-solving research project through integration with priorand concurrent course work. Includesclass presentations, simulations that combine knowledge and skill.
OL 460 Leadership Practicum (3) Emphasizes practical application of concepts, theories, and practices of leaders. Students design and implement a problem-solving research project through integration with priorand concurrentcoursework. Includesclass presentations, simulations that combine knowledge and skill.

## Philosophy (PHIL)

Philosophy courses are taught by the faculty of the Department of Philosophy and Religion.
PHIL 111 Introduction to Western Philosophy (3) Develops and enhances critical thinking skills through the analysis and discussion of perennial philosophical problems. Emphasis on developing critical reading and discussion skills, writing expository and evaluative analysisofextendedargumentprose, andconstructingargumentative essays. Prerequisite: Freshman or sophomore standing (closed to junior and senior students).
PHIL 121 Introductory Ethics (3) Presents a systematic and historical discussion of moral and social values through classical and contem-
porary readings. Emphasis on applying moral theories to concrete moral problems.
PHIL 211 Ancient Greek Philosophy (3) Develops and analyzes philosophicaltheoriesfromthePre-SocratesthroughtheHellenistic periods. Emphasis primarily on the thought of Plato and Aristotle.
PHIL 221 Modern European Philosophy (3) Develops and analyzes philosophical theories from the 16th through the 18th centuries. Emphasis on the works of Descartes, Spinoza, Leibniz, Locke, Berkeley, Hobbes, Hume, and Kant.
PHIL 231 Symbolic Logic (3) Introduces fundamental principles andtechniquesofmodernsymbolicormathematicallogicincluding truth functional logic, quantification theory, and the logic of relations. Especiallysuitedforstudentswithinterestsinmathematicsand computing science.
PHIL 240 Philosophy and Religion (3) Examines mutually intersectingthemesandinfluencesbetweenWesternphilosophyandreligion fromantiquitytothepresentday.Sampletopicsincludethenatureof religiousexperience,claimstoreligiousknowledge,therelationship between faith and reason, etc.
PHIL 241 Science, Technology and Society (3) Examines the current state of science and technology along with their effects on social change. Also explores the future prospects and perils of science and technologyinlightofglobal problemsandtheextenttowhichhuman beings can address them responsibly.
PHIL 301 Selected Topics in Philosophy (3) Studies selected topics of currentinterest.Specifictopicmayvaryeachtimethecourseistaught. Mayberepeatedforcreditastheselectionoftopicschanges.Prerequisite: One course in philosophy or religion, or permission of instructor.
PHIL 316 Environmental Ethics (3) Presents a systematic discussion ofenvironmentalethicsandkeyissuestherein.Emphasisonapplying moral theories to concrete moral problems.
PHIL 317 Bioethics (3) Considers selected problems in bioethics. Topics may include abortion, euthanasia, and genetic engineering. Prerequisite: Junior or senior standing, or permission of instructor.
PHIL 321 Social and Political Philosophy (3) Explores various social andpoliticalphilosophies regardinghowtoideallyconstructsociety.
PHIL 322 Kant and the Nineteenth Century (3) Develops and analyzes philosophical theories from Kant through Nietzsche. Primary focus will be on Kant and thinkers selected from among Hegel, Schopenhauer, Kierkegaard, Marx, and Nietzsche.
PHIL 350 God, Suffering and Evil (3) How can God be all-good andall-powerfulifevilexists? Theclassicquestion oftheodicyguides this course,withastudyofclassicandcontemporaryattemptstodeal with the problem ofevil.This courseexploreshowpeopleinreligious traditions have thought about and lived in relation to evil and the experiencesofsuffering.Sustainedfocusononetopicenablesstudents to practice critical thinking in the study of philosophy and religion. Prerequisite: FYS-112.
PHIL 412 Contemporary Philosophy (3) Examines philosophical movements in the 19th through the 21st centuries. Topics may vary fromsemesterto semesterandmayemphasizemajormovementsor schoolsofthoughtinthisperiod, suchasexistentialism, phenomenology, logical positivism, linguistic philosophy, and/or pragmatism as well as individual philosophers.
PHIL 445 History and Philosophy of Science (3) Studies methodological problems of the natural and social sciences from a historical pointofview.Alsoexaminesthelogic ofexplanationandtheoryconstruction. Prerequisite: One course in philosophy, or junior or senior standing in natural or social science.

PHIL 447 Philosophy of Mind (3) Analyzes the relationship between mental and bodily phenomena and the nature of cognitive activity. Explores whether a strictly physicalist approach to mind is feasible. Prerequisite: One course in philosophy or permission of instructor.
PHIL 450 Gender, Power, and Oppression (3) Explores philosophical analysis of gender, power, and oppression, with special attention to howintersectionaloppressionoverlapsinexperience(e.g.,duetorace, class, etc.). Prerequisite: FYS 112 or FYS 312.
PHIL 451 Philosophy of Agency (3) Examines the concept of agency fromphilosophical,psychological,andbiologicalperspectives. Topics include intentional action, free will, autonomy, selfhood, guidance, control,andthephenomenologyofaction. Prerequisite:Onecourse in philosophy or permission of instructor.
PHIL 459 Philosophical Classics (1) In a seminar setting, studies selected philosophical classics ortexts destined to becomeclassics. Mayberepeatedforcreditastheselection oftextschanges.Prerequisite:Onecourse in philosophy orreligion,orpermission ofinstructor.
PHIL 491 Directed Study in Philosophy (1) Offers research in special problems or persons under the direction of a member of the philosophy faculty. May be repeated for up to nine hours. Prerequisite: Permission of instructor.

PHIL 492 Internship in Philosophy (1) Offers students the opportunity forsupervisedfield experience inteaching orresearch eitheron campus or at some other facility appropriate to the student's field of study.Prerequisite:Completion ofatleasttwo courses inphilosophy.
PHIL 499 Senior Seminar in Philosophy (1-3) Required of all senior philosophy majors. Affords the student the opportunity to work independentlyinthepreparationofanextendedpaperandtopresent this paper in a seminar to other majors in philosophy, religion, and pretheology. Prerequisite: Senior standing.

## Physical Therapy (PT)

PhysicaltherapycoursesaretaughtbythefacultyoftheDepartments of Physical Therapy and the School of Public Health.
PT 101 Patient Care Skills and Interventions (3) This course introducesthefoundational proficiencies necessaryforpracticeintheprofession of physical therapytoincludeaquatic pooltherapy, chemical responses to inflammation, compression, cryotherapy, diathermy, electricalstimulation, electromagneticbiofeedbackandrelaxation, hydrotherapy,interferentialcurrent,effleurageandpetrissage, neuromuscularelectricalstimulation, painmanagement,Russianelectrical stimulation, transcutaneous electrical nerve stimulation, thermal modalities, traction, and ultrasound.
PT 102 Musculoskeletal Rehabilitation (5) This course emphasizes the physical therapy management of persons with musculoskeletal impairments. Students learn treatment progressions for common orthopedicconditionsandsurgical procedures. Thefollowingtopics areaddressed:balanceasitrelatestotheankle/footbalancereaction, exerciseconcepts,exerciseprogression(breathingpatterns,movement strategies, and relaxation techniques), inflammation and repair of tissues, orthopedicpharmacology,orthopedicrehabilitation, andsoft tissuemobilization. Assignmentswillreinforcementcommunication between PTs and PTAs and documentation.
PT 103 Introduction to Clinical Practice (3) This course provides an introduction to the foundational proficiencies necessary for the practice of physical therapy. The following topics are addressed: adverseconsequencesofprolongedinactivity,aging, assistivedevices, bloodbornepathogens and infection control, draping, education of supportive personnel to assist with transfers, Medicare / Medicaid, mobilitytraining withassistivedevices,normalhumandevelopment, patienteducation, patientequipment,positioningandrolling, profes-
sional and therapeutic communication, sterile technique, tilt table, transfers,vitalsigns, wellnessandhealth promotion, wheelchairs,and wound care.

PT 106 Functional Anatomy Lab (2) Introduces skills of goniometry andmanualmuscletesting.Includesgrossassessmentofpostureand gait. Prerequisite: EXSS 112. Corequisites: EXSS 113 if not already taken; ID 356 if not already taken. Spring.
PT 110 Field Experience for PTA (1) Introduces physical therapy throughobservationsatclinicalfacilities and by readingappropriate articles. Student accompanies a physical therapist or physical therapist assistantat a facility to develop an understanding of the various roles and duties of the personnel and an appreciation of the variety of patients and their interventions. Student may assist in simple proceduresasselected bytheclinical supervisorandhasopportunityto improvecommunicationskills.Providesintroductiontootherhealth careprofessionals andtotherole oftheadministratorofphysicaltherapy services. Prerequisite: Admission to the PTA program. Spring.
PT 111 Clinical I (4) Introduction to clinical facilities as an active participant in the health care team. Orientation to clinical setting and proceduresprovided bytheclinical instructor.Studentsusebasic physical therapy procedures, administer modalities, as well as carry out basic exercise programs and gait training. All treatment supervised by a physical therapist. Students will be in the facility full time, five days a week for six weeks. Prerequisites: EXSS 112, 113; ID 356; PT 101, 102, 106, 200. Summer.

PT 152 Clinical and Professional Issues I - Intro (1) This course is the first of two clinical and orientation to and strategies for success in the professional program and professional practiceexpectations. Students explore the history and practice of physical therapy, communication requiredforprofessional relationships, thevalue-based behaviors expected ofphysicaltherapistassistants, and professional ethics. Students are introduced to the American Physical Therapy Association and state and federal laws applicable to the practice of physical therapy.

PT 156 Biomechanics for the Physical Therapist Assistant (3) Provides Physical Therapist Assistant students with an understanding of the mechanics of human movement by instruction in anatomy, physiology, arthrokinematics, and gait analysis. Prerequisites:PHYS 100, EXSS 112, and entry to the Physical Therapist Assistant (PTA) program.
PT 200 Pathophysiology (3) Covers basic pathologic conditions and principles. Emphasizes disorders of the musculoskeletal, nervous, cardiopulmonary, andimmunesystems.Studentsexpectedtoexplain the etiology, signs, symptoms, clinical course, and primary medical interventions of disorders presented. Students also expected to understandhowdifferentdiseaseprocessesaffectthepatient'sability to participate in physical therapy and achieve an optimal functional outcome. Prerequisites: EXSS 112 and 113 or 221/221L; ID 356; PT 102. Summer.

PT 210 Multiple Systems Rehabilitations (4) Student expected to demonstratemanually andinwrittenformtreatmenttechniquesfor adultpatients of all ages with amputations, burns, cardiopulmonary disorders, peripheralvasculardisorders,traumaticbraininjuries, and wounds.Unitson proprioceptiveneuromusculartrunkpatternsand techniques and women's health issues are presented. Students will experienceanddemonstrateapplication ofthesetechniquesduring simulated patient situations in the laboratory setting. Lecture/Lab. Prerequisites: PT 102, 111, 200. Fall.
PT 249 Clinical II (5) Student is placed in the clinical setting (40 hours per week for six weeks) to become an active participant in the health care team. Actively involved in the care of patients under the
supervision of a PT. Experience develops therapeutic interventions and patient care skills. Prerequisites: PT 111, 210, 251. Spring.
PT 250 Clinical III (5) Final six-week clinical experience continues to develop interventions, techniques, and patient care skills. Upon completion of this affiliation, students are expected to be able to practice as entry-level physical therapist assistants. Prerequisite:PT 249. Spring.

PT 251 Neuromuscular Rehabilitation (4) Lecture-lab. Basic knowledge of physical therapy interventions is expanded to include the treatment of adults and children with neuromuscular conditions including stroke,spinal cordinjuries, and developmentaldisabilities. Emphasizesstudent'sdevelopmentofpsychomotorskillstofacilitate functional patientmovement.Studentsdemonstratevariousphysical therapy interventions and discuss patient progression asoutlined in patient'splan ofcare.Studentsexpectedtoaccuratelyassesspatient status and document patient findings. Experiential opportunities, clinical simulations, role playing, and small group learning activities reinforce mastery of content. Prerequisites:PT 111, 200. Corequisite: PT 210. Fall.
PT 252 Clinical and Professional Issues II: Transition to Practice (2) Lecture-seminarcoursediscussescurrent, professionalissuesthat affect the practice of physical therapy and the role of the PTA. Students examine various ways in which a PTA functions as a member ofthehealth caredeliveryteam.Addressestheroleoftheassistantin departmentactivities,specializedareasofpracticeandtheAmerican Physical Therapy Association. Prerequisites: PT 210, 251. Spring.
PT 370 Special Topics in Physical Therapy (1) Allows students to pursueareasofspecialinterestwithinhealth careorphysicaltherapy. Areas may include research, clinical education, administration, and classroomorcommunityteaching.Studentsresponsibleforcontactingthedesignatedfacultymembertodiscussandplantheexperience. Experience culminates in a formal written document, product, or reflection paper.
PT 410 Foundations of PT (2) This course introduces the foundational proficienciesnecessaryforpracticeintheprofession ofphysical therapy.Topicsincludebodymechanics,elementsofdocumentation (initial encounter, daily note, re-examination, discharge summary), effects of inactivity, foundations of therapeutic exercise, infection control, mobility training, patient/client equipment, patient/client stress, positioningandturning, posture preparationforpatient/client care, proprioceptive neuromuscular facilitation trunk and extremity patterns, range of motion exercise, stretching exercise, transfer training,vitalsigns, wheelchairs, and woundmanagement.Principles from the Guide to Physical Therapist Practice are incorporated into thecourseandwrittendocumentation, as suggested bytheguide, is utilized for specific lab activities. Students participate in initial field experiences in an acute care, inpatient rehabilitation, and pediatric facility. Prerequisite: PT 441.

PT 410L Foundations of Pt Lab (0) Lab that accompanies PT 410, Foundations of Physical Therapy.

PT 412 Physical Interventions (2) This lecture/lab course provides the student with an introduction to the therapeutic modality and otherphysicalinterventionskillscommonlyencounteredinphysical therapypractice.Thecoursecoversthehealing process, painmechanisms,indications/contraindication,and physiologicaleffects ofeach intervention in a lab/lecture experience. The primary interventions coveredincludeelectricalstimulation, hydrotherapy, softtissuemassage, cryotherapy, thermal modalities, electromagnetic modalities, ultrasound, traction, and compression. Prerequisite: PT 441.
PT 412L Physical Interventions Lab (0) Lab that accompanies PT

## 412, Physical Interventions.

PT414 Foundations of Therapeutic Exercise (2) This course provides thestudentwithanintroductiontocommonlyprescribedtherapeutic exerciseinterventions.Anemphasiswillbeplacedonunderstanding therapeutic exercisefromamotorcontrol perspectiveand how pain affects motor control and patterns of movement. Progression of fundamentalexercisesthroughtheneurodevelopmental posturesas theyrelatetocommonimpairmentsfoundintheoutpatientphysical therapy setting will be covered. Students will learn the purpose of eachtherapeuticexercisetechniqueanddemonstrateapplicationand critical thinking skills through practical experiences in preparation for future patient management courses. Prerequisite: PT 441.
PT 414L Foundations of Therapeutic Exercise Lab (0) Lab that accompanies PT 414, Foundations of Therapeutic Exercise.

PT 417 Test and Measurements (2) Introduces the basic procedures for objective assessment of the musculoskeletal system through measurement of joint range of motion (ROM) and muscle strength. Laboratorysessions will allow practice in the techniques of goniometry and manual muscle testing (MMT). Inclinometers, hand held dynamometersandisokinetictestingareintroduced.Prerequisite:PT 441. Spring.

PT 417L Test and Measurements Lab (0) Introduces the basic proceduresforobjectiveassessmentofthemusculoskeletalsystemthrough measurement of joint range of motion (ROM) and muscle strength. Laboratory sessions will allow practice in the techniques of goniometry and manual muscle testing (MMT). Inclinometers, hand held dynamometersandisokinetictestingareintroduced.Prerequisite:PT 441. Spring.

PT 421 Patient Management I Musculoskeletal (8) Initiates patient managementsequence.Expandsupontheanatomical,kinesiological, and therapeutic exercise principles presented in previous courses. Emphasis on examination and assessment of the musculoskeletal system.Commonconditionsandimpairmentsarepresentedandreinforced through use of case examples. Appropriate interventions are addressedconceptuallyand performedinthelaboratory.Addresses concepts and techniques related to proprioceptive neuromuscular facilitation.Medicaldocumentationintegratedintolaboratoryactivitiesandassignments. Experientialopportunities included.Prerequisite: PT 441. Corequisite: PT 417. Spring.
PT 421L Patient Management I Musculoskeletal Lab (0) Initiates patientmanagementsequence.Expandsupontheanatomical,kinesiological, andtherapeutic exercise principles presentedin previous courses. Emphasis on examination and assessment of the musculoskeletalsystem.Commonconditionsandimpairmentsarepresented andreinforced through use of case examples. Appropriate interventions are addressed conceptually and performed in the laboratory. Addressesconceptsandtechniques relatedtoproprioceptiveneuro-muscularfacilitation.Medicaldocumentationintegratedintolaboratoryactivities andassignments. Experientialopportunities included. Prerequisite: PT 441. Corequisite: PT 417. Spring.

PT 423 Wellness in Physical Therapy (2) This course address issues related to wellness and overall health and fitness promotion from a physicaltherapyperspective.Areas oflearning willincludeintroductiontocommonfitnessandwellnessprograms,nutrition, balanceand movementscreening, andapplication oftransitionfromrehabilitation to encouraging behavior change promoting lifelong wellness. This course, when completed in addition to PT 451/551 and PT 452/552, meetsthecriteriaforthegeneraleducationcapstoneoutcomeaswell as one writing-intensive course. Prerequisite: PT 441.

PT 431 Gross Anatomy (5) For students in the physical therapy pro-
gram.Emphasis on gross anatomy of the human skeleton, muscular, vascular,andnervoussystems.Knowledgeofgrossanatomy provides students with a sound foundation upon which other courses in the physical therapy curriculum can directly or indirectly be related. Content presented in a regional approach, and includes anatomical concepts such as proper terminology, surface anatomy, and joint function. Gross anatomy is best learned in the laboratory through dissection ofthe human body. Course is primarily alaboratory experience. Prerequisite: PT 441.
PT 432 Kinesiology (3) Introduces the elements and principles basic to the study of human movement. It combines the disciplines of biomechanics, physiology, andanatomytoanalyzefunctionalmovements, balance, and gait. Discusses concepts ofkinetics, kinematics, length-tension relationships, and the functional significance of the structure of biological tissues. Emphasizes clinical application of mechanical concepts. Provides an introduction to surface anatomy. Prerequisite: Acceptance into the DPT program. Summer.
PT433Human GrowthandDevelopment(3)Exploresconsequences ofdisruptioninnormal physiologicaland developmental processes. Common diseases and disorders involving all major body systems addressed, aswellasselectedsystemicdiseases.Topicsincludediseases ofinfectious,immunesystem,traumatic, degenerative, and congenitalorigin.Focuseson pathogenesis, clinical presentation,laboratory findings, prognosis,medicalinterventionincluding pharmacological agents, andimplications relatedto physicaltherapypractice.Prerequisite: Acceptance into the DPT program. Summer.
PT434 Medical Pathology I (2) Explores consequences of disruption in normal physiological and developmental processes. Common diseases and disorders involving all major body systems addressed, aswellasselected systemicdiseases. Topics includediseases ofinfectious, immunesystem,traumatic, degenerative, andcongenitalorigin. Focuses on pathogenesis, clinical presentation, laboratoryfindings, prognosis,medicalinterventionincluding pharmacologicalagents, and implications related to physical therapy practice. Prerequisite: PT 441. Fall.
PT 436 Medical Pathology II (2) This course explores the consequences of disruption in normal physiological and developmental processes.Commondiseases, disordersandsyndromesinvolvingthe neurologicalbodysystemsareaddressed, aswellasselectedsystemic diseases. Topics include diseases of an infectious nature, immune systemdeficiencyanddegenerativeorigin.Thecoursefocusesonthe pathogenesis, clinical presentation, laboratory findings, prognosis, medical intervention including pharmacologic agents and implicationsrelatedtophysicaltherapypracticeinregardstotheneurological body system. Prerequisite: PT 441. Spring.
PT 441 Clinical and Professional Issues I Introduction (2) First in series ofclinicaland professionalissuescourses. Providesintroduction toprofessional practiceexpectationsofphysicaltherapy.Providesorientationandstrategiesforsuccess intheprofessional program.IntroductiontoAmericanPhysicalTherapy Association. Students explore the practice of physical therapy utilizing the Guide to Physical Therapist Practice and the core values of the profession. Introduction to professionalethicsand communication requiredinprofessionalrelationships. Prerequisite: Acceptance into the DPT program.Summer.
PT 442 Clinical and Professional Issues II Adult Learning Principles (1) Second in series of four clinical and professional issues courses. Focuses on physical therapist's role as an educator and developing one'sowncultural competence. Providesintroductiontofederal programs, including Medicare and Medicaid. Prerequisite: PT 441. Fall.
PT 451 Scientific Inquiry I: Stats and Research (2) This is the first inaseries offivecourses designedtopreparethegraduateto practice
in an evidence-based manner and to be an astute consumer and judge of scientific research. Topics include fundamentals of clinical rehabilitationresearchincludingevidence-based practice,searching the literature, and research ethics. Fundamentals of clinical research approachesincludevariablerecognition, researchvalidity,measurementtheory, reliability, responsiveness, and validity. Basicstatistical procedurestoassessmeandifferencesaswellasinferencetestingare covered. This course, when completed in additionto PT452/552 and PT 423/523, meets the criteria for the general education capstone outcome as well as one writing-intensive course. Prerequisite: PT 441. Fall.

PT 452 Scientific Inquiry II (2) This is the second in a series of five courses designed to prepare the graduate to practice in an evi-dence-basedmannerandtobeanastuteconsumerandjudgeofscientific research. Topics include critical appraisal of research related the diagnostic process and intervention trials. Student completecritical appraisalsofpublishedresearchinawrittenformatand presenttheir appraisalsorally.Thiscourse, whencompletedinadditiontoPhysical Therapy $451 / 551$ and $423 / 523$, meets the criteria for the General Educationcapstoneoutcomeaswellasonewriting-intensivecourse. Prerequisites: PT 441. Spring.

## Physics (PHYS)

Physics courses are taught by the faculty of the Department of Physics. See also Astronomy (ASTR).
PHYS 100 Conceptual Physics (3) Presents basic principles of physics throughdescriptiveanddemonstrativetechniques.Fornon-science majors. (Creditmay notbe countedtoward graduationforphysicsor engineering majors.) Prerequisite: One year of high school algebra.
PHYS 121 Algebra Physics I (4) Presents basic principles of mechanics, fluid statics, fluid dynamics, heat, and sound. Three hours lecture, two hours lab. Prerequisite:Mathematics 105 or two years high school algebra. Recommended: One year high school physics.
PHYS 122 Algebra Physics II (4) Continues Physics 121. Presents basic principles of electricity, magnetism, light, relativity, atomic, andnuclearphysics. Threehourslecture,twohourslab.Prerequisite: Physics 121.
PHYS 150 Intro to Physics at UE (2) An introduction to physics and faculty research areas in physics for first-year physics majors. Topics mayincludespecial relativity,biophysics, particlephysics,optics,and/ or solid state physics, but are subject to change. Class is taught by multiple members of the physics faculty.
PHYS 190 Physics Today (1) Presents the nature of the work of a physicistand opportunities in the field of physics. An individualized course wheretopics of interest to each studentare pursued through projectsorselectedreadings.Recommendedforallfreshmencontemplating a major in physics.
PHYS 195 Special Topics: Physics or Technology (1) Introduction to specialtopicsinphysicsortechnologythatarenotincludedinregular courseofferings.Offereddependingoninterestordemand. Prerequisite: One year high school algebra.
PHYS 201 Physics of Music (4) An examination of the physics of sound and music. It is in the Outcome 8: Scientific Literacy category of the General Education Program and is intended primarily for students of music. Physics 200 includes basic principles of acoustics, response of the ear to sound, musical tuning scales, auditorium acoustics, andthe productionandanalysisofinstrumentalandvocal sounds.

PHYS 210 Calculus Physics I (4) Calculus-based treatment of mechanics, waves, and thermodynamics. Three hours lecture, two hours lab. Prerequisite: Mathematics 221. Recommended: One year
high school physics.
PHYS 211 Calculus Physics II (4) Calculus-based treatment of electricity, magnetism, and light. Three hours lecture, two hours lab. Prerequisites: Mathematics 222; Physics 210.
PHYS 213 Introduction to Modern Physics (3) Introduction to the quantumnatureofmatterandradiation.Examinesthedevelopments in physics since the late 19th century, primarily in the areas of relativity, atomic, nuclear, and particle physics. Three hours lecture. Prerequisites: Mathematics 323; Physics 211.
PHYS 214 Modern Physics Lab (1) Complements Physics 213 by providinglaboratoryexperienceinrelativity,atomic, nuclear,and particle physics. Two hours lab. Corequisite: Physics 213.
PHYS 220 Simulations for PHYS 210 (1) A 2-hour weekly computer labdesignedtobetaken concurrently with Physics 210.Students will useVPythontosimulatethephysicalsystemsandconceptslearnedin PHYS 210, making visual representations of the related phenomena.
PHYS 221 Simulations for PHYS 211 (1) A 2-hour weekly computer lab designed to betaken concurrently with Physics 211. Students will useVPythontosimulatethephysicalsystemsandconceptslearnedin PHYS 211, making visual representations of the related phenomena.

PHYS 305 Mathematical Physics (3) Examines a variety of mathematicalmethodsandtheirapplicationinthesolution ofphysicsproblems. Topics include vector and function spaces, special functions such as Besselfunctionsand Legendrepolynomials,curvilinearcoordinates, Fouriertransforms,ordinaryand partial differentialequations. Three hours lecture. Prerequisites: Mathematics 323; Physics 211.
PHYS 312 Classical Mechanics (4) Emphasizes Newton's Second Law in differential form. Covers driven damped harmonic motion, central fields, rigid bodies, Lagrange and Hamilton equations, and acceleratedreferenceframes.Fourhourslecture.Prerequisites:Physics 121 or 210, 305.
PHYS 320 Astrophysics (3) Detailed study of the physical processes that drive a variety of astrophysical phenomena. Topics includeradiationproductionandinteraction with matter,accretingsystems,and observational techniques from radio to gamma-rays.Specific applicationsmayinclude(dependingonstudentinterest)stellarstructure andevolution,compactobjects, galacticcompositionanddynamics, andtheoriginandstructureoftheuniverse.Threehourslecture.Prerequisites:Mathematics323;Physics 213.Recommended:Astronomy 101. Same as Astronomy 320.

PHYS 322 Biological Physics (3) Introduces biophysical methods from a physics perspective and discusses the application of these methods toward research questions in biology. Topics include biomolecular structures, structure determination and simulation, and molecular motors. Three hours lecture. Prerequisites: Mathematics 221; Physics 210 or 121. Same as Biology 322.
PHYS 330 Nuclear Physics (2) Examines the following topics in nuclear physics: radioactivity, atomic masses, nuclear models, and nuclear fission and fusion. Two hours lecture. Prerequisites: Physics 213, 305.
PHYS 331 Condensed Matter (2) Examines the following topics in condensed matter physics: classical and quantum free electron models, crystal and reciprocal lattice vectors, lattice vibrations and phonons,energybandsinsolids,metals,semiconductorsandsuperconductors. Two hours lecture. Prerequisites: Physics 213, 305.
PHYS 340 Computational Physics (3) Provides physics majors with a functional understanding of how to apply modern programming languages to the solution of a wide variety of problems in physics. Topics include solutions to differential equations using a variety of techniques, cellular automata, Monte Carlo techniques, and high
performancecomputing.Threehourslecture.Prerequisites:Mathematics 323; Physics 213.
PHYS 350 Electronics (4) Treats topics in both digital and analog electronics relevant to the study of physics. The study of analog electronics includes basic circuit analysis, filters, diodes, transistors, andoperationalamplifiers. Topicsindigitalelectronicsincludelogic systems andgates,analogtodigital conversion, anddigitaltoanalog conversion.Threehourslecture,twohourslab.Prerequisites:Mathematics 221; Physics 122 or 211.
PHYS 395 Physics Journal Seminar (1) A research article reading/ discussion seminarfor physics majors. Each week, students will read and discuss current published articles of physics research in various subfields of physics. Format will bediscussion, and students will take turns leading the discussion with faculty. Repeatable course.
PHYS 401 Advanced Electronmagnetics (4) Examines Maxwell's equations,electricandmagneticfields, vectorandscalar potentials, gaugetransformations, boundaryvalueproblems,electromagnetic radiation, and relativistic electrodynamics. Four hours lecture. Prerequisite: Physics 305.
PHYS 405 Advanced Mathematical Physics (2) Examines a variety of advancedmathematicalmethodsandtheirapplicationinthesolution of physics problems. Topics include functions of complex variables, complexanalysis, Laplace transforms, introductionto group theory and Green's functions. Two hours lecture. Prerequisite: Physics 305.

PHYS 414 Advanced Laboratory (3) Introduces advanced measurementtechniquesemployedinexperimentalphysics research.Emphasis on the entire experimental process, including literature search, experiment construction, data acquisition, data and error analysis, and technical writing for publication. Six hours of laboratory per week. Prerequisite: Physics 214.
PHYS 416 Statistical Thermodynamics (3) Develops thermodynamicsfromamicroscopicpointofviewandthen relatesthis microscopic view to macroscopic parametersthrough statisticalmethods. Three hours lecture. Prerequisites: Physics 213, 305.
PHYS 421 Atomic Physics (2) Examines the Bohr model and wave mechanical approach to the hydrogen atom, magnetic dipole moments, spin-orbit interaction, energy states and transitions in multi-electron atoms, X-rays, and the Zeeman effect. Two hours lecture. Prerequisites: Physics 213, 305.
PHYS 422 Cosmology (2) Explores history and evolution of the universe withemphasis on theoretical models that may betested by modernexperimentalandobservationaltechniques. Topicsinclude the Big Bang, cosmic microwave background radiation, darkenergy, darkmatter,theorigins ofstructureintheuniverse, general relativity, and specific topics of interest to researchers in the field. Two hours lecture. Prerequisite: Physics 305. Recommended: Astronomy 101, 320. Same as Astronomy 422.

PHYS 423 Particle Physics (3) Introduction to the physics of elementaryparticles. Topicsincluderelativistic particledynamics,scattering processes, and Feynman diagrams, with applications to quantum electrodynamics (QED). Two hours lecture. Prerequisites: Physics 213, 305.
PHYS 427 Optics (3) Investigation of the interaction of light with matter, physical optics, Fourier optics, and lasers. Two and one-half hours lecture, two hours lab every other week. Prerequisite: Physics 305.

PHYS 471 Quantum Mechanics (3) Systematic introduction of formal aspects of quantum mechanics. Includes Schrodinger (wave representation) andHeisenberg(matrixrepresentation) approaches. In-depth examination of the simple harmonic oscillator and hydro-
gen atom in terms of quantum mechanics, followed by additional applicationsandmethods.Threehourslecture.Prerequisites:Physics 213, 305.

PHYS 493 Physics GRE Preparation (1) Prepares students for the physics Graduate Record Examination through review of physics concepts, practice tests, and evaluation of test taking strategies.
PHYS 494 Physics Seminar (1) Seminar presentation and written paper on research projects by students. Senior physics majors are required to complete the Major Field Test in physics. Course may be repeated for additional credit.
PHYS 495 Special Topics: Physics or Technology (1) Advanced specialtopicsinphysicsand/ortechnologythatarenotofferedregularly.Offered depending on interestordemand. Prerequisite:Junior standing.
PHYS 498 Physics Internship (1) Provides off-campus research experienceforphysicsmajors.Prerequisites:Juniorstanding, permissionof instructor and department chair.
PHYS 499 Research/Independent Study in Physics (0) Allows individualslaboratoryresearchorindependentstudyonaproblemortopic of special interest. Subject and credit to be arranged with instructor and department chair. Prerequisite: Permission of instructor.

## Political Science (PSCI)

Political science courses are taught by the faculty ofthe Department ofLaw,Politics, andSociety.Unlessotherwisenoted,therearenoprerequisites for 100-or 200 -level courses. All 300-or 400 -level courses require a 100- or 200-level course or permission of the instructor. Political Science 493, 495, and 499 require permission of the department chair.
PSCI 100 World Politics (3) Introduction to theory and practice of comparative politics as well as political science. Focuses on political behavior, political system, political process, and world politics. Fall, spring.
PSCI 143 American National Government and Politics (3) Provides a broad overview of the institutional arrangement of the American politicalsystem,itsconstitutionalandtraditionalunderpinnings,and the ways in which various political actors operate within it. Encourages critical analysis of political information and active citizens participation in our democratic system. Fall, spring.
PSCI 160 Introduction to International Relations (3) Introduction to the theory and practice of sovereignty, conflict and cooperation, foreign policy, politicaleconomic relations, development, andinternational environmental issues. Fall, spring.
PSCI 190 Topics in Politics (3) Subjects offered because of unique relevancetoeventsordevelopmentsinpoliticalscienceorintheworld of politics.Specifictopics announcedintheannualschedule.Maybe repeated.
PSCI 290 Topics in Politics (3) Subjects offered because of unique relevancetoeventsordevelopmentsinpoliticalscienceorintheworld ofpolitics.Specifictopicsannouncedintheannualschedule.Maybe repeated. Fall, spring.
PSCI 312 Political Parties and Elections (3) Study of institutional political parties, nominations, campaigns, elections, and their influence on policy making.
PSCI 313 Congress and Legislative Process (3) Examines the organizationandfunction oftheUnitedStates Congress and thelegislative process.Specialattentionpaidtopresidentialandcongressionalinteraction and its effect on policy.
PSCI 318 Research Methods in Political Science (3) Introduction
to research design and methods with some emphasis on statistical analysis.Junioror senior status required; or permission of instructor. Spring.
PSCI 320 Comparative Politics Seminar (3) Examines the historical developmentandtrends ofcomparative politics and exploresmajor theories involving the political system, state and society, political culture, rational choice, Institutionalism, political economy, development, democracy, and democratic transitions.
PSCI 326 Women and American Politics (3) Examines the expanding involvementandthedistinctive contributions of women in contemporary American politics as voters, candidates, and officeholders. Includes an overview of the first and second waves offeminist activismin American political history, as well as an exploration ofselected public policy issues of particular concern to women.

PSCI 343 Politics and the Media (3) Analysis of the media's impact upon the political process, institutions, and the individual. Exploration of the role played by communication, principally through the mass media, in the conduct of governmentand the making of public policy.
PSCI 344 Political Opinion and Political Behavior (3) Examines the formation and measure of public attitudes and opinions and their effect on contemporary American politics.
PSCI 345 Constitutional Law: the American Constitution (3) Reviewsjudicialdecisionsandinterpretationswhichhavecontributed to the growth and development of the United States Constitution in such areas as thefederal system, intergovernmental relations, presidential powers, government functions, and civil rights.
PSCI 349 State and Local Government (3) Study of the institutions, organization, and politics of state and local governments. Attention given to intergovernmental relations.
PSCI 360 Politics of the Middle East (3) Examines specific historical trendsandcontemporaryissuesfacingthepeopleandgovernmentsof the Middle East spanning from Libya to Iran and from Turkey to the Southern Arabian Peninsula.

PSCI 361 U.S. Foreign Policy (3) Introduction to the U.S. foreign policy making process that surveys areas of foreign affairs. Makes comparisons between United States and other developed as well as developing nations. Emphasis on economic, environmental, and security and defense policy. Institutional factors considered include theinteractionbetweenthepresidency,congress,bureaucracy,and public opinion.
PSCI 362 International Security (3) What are the key international securitychallengesintheworldtoday, andhowcantheyberesolved? This course surveys the major actors in international security, why theythreatenoneanother,andthestrategiestheyusetoalleviatethose threats; and it goes on to examine issues including war and peace, nuclear weapons, civil war, terrorism, and cyber warfare.

PSCI 363 International Law and Organization (3) Examination of internationalorganizationsonquestionsofmilitarysecurity, theenvironment, the global economy, economic development, and human rights.TheUnitedNations, regionalorganizations, nongovernmental organizations, and multinational corporations will be addressed in the context of international law. Considers theoretical and political foundationsofinternationallawaswellascontemporaryapplication and enforcement.

PSCI 369 Terrorism and Counterterrorism (3) What is terrorism? Why do groups adopt terrorism? How can terrorism best be fought? This course examines in detail the causes and history of terrorism, counterterrorism strategies and challenges, and ethical questions involved in both terrorism and counterterrorism.

PSCI 376 Historical and Contemporary Political Thought (3) Examines historical and contemporary political thought in terms of thematiccontinuities anddiscontinuitiesfromclassical Greekthoughtto contemporarytheoreticalworks. Particularattentiongiventoearlier works in terms of their relevance to current political problems.
PSCI 380 Latin American Politics (3) Examines concepts and theoreticalarguments concerningcivilizations,history, cultures,religions, socialclasses,economic development, anddemocratizationinLatin America.

PSCI 390 Topics in Politics (3) Subjects offered because of relevance to events or developments in political science or in the world of politics. Specific topics announced in the annual schedule. May be repeated.
PSCI 435 Human Rights Seminar (3) This course serves as a survey ofthe complexities of international human rights in anera of increasingglobalization.Studentswillbeexposedtotheoreticalfoundations in various civilizations and cultures as well as the evolution of human rights, the legal instruments, and the global, regional, and national mechanisms that exist to promote and protect these rights.
PSCI 440 Environmental Law and Policy (3) Examines role of politics, economics, and culture in the formation of domestic and international environmental policies and laws. Focuses, in an era of increasing globalization, on ecosystems, population, energy, biodiversity, and the legal complexities of environmental regulatory and administrative systems.
PSCI 459 Asian Politics (3) Examines the impact of history, culture, governmentstructures,andeconomicchangeonpolitical processesin Asian countries. Primary attention paid to China, Japan, and Korea followed by other Asian countries.
PSCI 461 Politics of the Global Economy (3) Analysis of the political aspects ofglobaleconomicrelations.Areasoffocusincludeglobalizationandinterdependence, tradepolicy, internationalfinance, development assistance, multinational corporations, energy and natural resources, and the role of international organizations.
PSCI 489 European Politics (3) Examines the historical patterns of social, economic, and religious conflict; structures of citizen representation in interest groups and political parties; electoral systems; constitutionalrelationshipsbetweenexecutive,legislature,andjudiciary;economicandforeignpolicies;andcurrentproblemsofnational identity in European countries.

PSCI 490 Topics in Politics (3) Subjects offered because of relevance to events or developments in political science or in the world of politics. Specific topics announced in the annual schedule. May be repeated. Fall, spring.
PSCI 493 Readings in Political Science (1) A planned program of reading and research under the direction of member of the faculty. May be repeated for credit. Fall, spring.

PSCI 495 Senior Seminar in Political Science (3) Capstone educational experience in political scienceoffers students an opportunity to use their substantive and methodological training in preparing a significant paperand sharing the intellectual experience with other members of the seminar. Fall.

PSCI 499 Public Policy Internship (1) Supervised field experience or internship in a political campaign, the state legislature, the United States Congress, the courts or an agency of the criminal justice system, or in an administrative setting. Candidates maintain a diary or logofexperiencesandprepareapapereitherreportingonsomeaspect oftheirexperientialeducationorreportingaparticularresearchproject. Fall, spring.
PSCI H385 Modern British Politics (3) Better understand the issues
which matter to any society today. Course enhances ability to make balanced and informed views on apparently complex issues by considering the social, economic, ethical, and political aspects of many controversial issues in Britain, includingeducation, health, Northern Ireland, Europe, housing, race relations, and prisons. Fall, spring.

## Psychology (PSYC)

Psychology courses are taught by the faculty of the Department of Psychology.
PSYC 121 Introduction to Psychology (3) Surveys major areas of psychology,includingmethodology,learning,memory,development, personality, psychopathology, and additional areas. Focuses on historical development, researchfindings, and applications in contemporary life. Fall, spring, summer.
PSYC 201 Psychology:Fields of Application (1) This course provides psychologymajorswithanoverview of(a).thevarioussubdisciplines within psychology, (b). the different types of graduate school programs in psychology, and (c).the many careeropportunities opento students majoring in psychology. This course is taken pass/fail only. Fall.
PSYC 205 Special Topics in Psychology (3) Examines specific topics in psychology through a seminar or workshop format. Prerequisite: Psychology 121 or permission of instructor.
PSYC 225 Lifespan Development (3) This course will focus on the development of individuals across the lifespan. Beginning with prenatalandearlyinfancydevelopment,thecoursewill progressthrough adolescence,adulthood, and topics indeath and dying.Material will include aspects of physical, cognitive, social, personality, and emotional development. This class will place an emphasis on theoretical models and experimental findings. The course adopts a discussion formatwithtextbook, primary readings, reaction papers, and aterm paper. Prerequisites: PSYC 121.
PSYC 226 Child and Adolescent Psychology (3) Examines developmentalstagesfrom conceptionthroughadolescence, giving special emphasistophysical,cognitive,social,andemotionalaspectsrelated tomaturationalaswellaslearning processes.Prerequisite:Psychology 121. Fall, spring.

PSYC 229 Social Psychology (3) Considers broad range effects of a social context on individual and group behavior. Examines interpersonal relations and actions, attitude developments and change, group dynamics, how we justify individual actions, advertising and news, prejudiceandstereotyping,loveandsex,leadership, andwork environmentsastheyrelatetoandaffectbehavior.Prerequisite:Psychology 121. Fall, spring.
PSYC 245 Statistics for Psychologists (4) Introduces descriptive statistics, probability, decisiontheory, andtestingofhypotheses byboth parametricandnonparametrictests.Emphasizes basicconcepts,SPSS computer analysis, and APA-format presentation of results. Three hourslecture,twohourslab.Prerequisites:Ninehoursofpsychology, including Psychology 121; general education mathematics requirement. Fall.
PSYC 246 Research Methods in Psychology (4) Emphasizes scientific basisofpsychology.Exploresresearchmethodsofmodernpsychology. Coversuseofstatisticsindesignofbehavioral experiments.Example experimentsareconductedtoaidcomprehension.Studentsgainskills necessary for management of simple research and interpretation of research reports. Three hours lecture, two hours lab. Prerequisites: Psychology 121, 245. Fall, spring.
PSYC 259 Abnormal Psychology (3) Examines abnormal behavior withemphasisonmooddisorders,affectivedisorders,andschizophre-
nia.Examinesthebiologicalandpsychologicalbases ofpsychopathologyand thosefactors involved in diagnosis and treatment ofmental disorder. Prerequisite: Psychology 121. Fall, spring.
PSYC 265 Applied Creativity and Design Thinking (3) This course will explore the concepts of design thinking and apply them to complexproblems.Knowledgeandskillsaredevelopedinempathy, problem-definition,ideation,rapid-prototyping,andexperimentation to foster innovation. Students will utilize collaborative, cross-disciplinaryapproachesandcreative problem-solvingstrategiestotackle multi-faceted problems and develop innovative solutions.
PSYC 320 Psychology and the Law (3) Examines how psychological research contributes to understanding our legal system. Topics include the reliability of eyewitness testimony; factors that affect jury decision making; interrogation and confessions; psychological profiling; clinical determination of insanity, competence, and future dangerousness;sexualvictimization;andrace.Prerequisite:Psychology 121; Psychology 246 or Sociology 235. Spring.
PSYC 326 Language Development (3) Introduces the nature of language development in infancy and childhood. Examines cognitive, developmental, environmental, and physiological influences on language skills. Theories of language development and their influenceson researchandourunderstanding ofchildrendiscussed. Topics include perception of sounds, acquisition of grammar, first andsecondlanguagelearning, anddevelopmentallanguagedisorders. Relationshipbetweenlanguageskillsandoveralldevelopment(social, cognitive, biological) also explored. Recommended Prerequisites: Psychology 121, 226. Spring, alternate years.
PSYC 333 Psychopathology in Children and Adolescents (3) Studies behavioral characteristics, causes, diagnosis, and treatment of the psychopathological problemsofchildhoodandadolescenceincluding anxiety states, developmental disorders, attention deficit disorder, conduct disorder, and autistic disorder. Discusses assessment and treatmentfrombiologicalandpsychological perspectives.Prerequisite: Psychology 121. Recommended: Psychology 226. Fall.

PSYC 355 Sensation and Perception (3) Examines perceptual processing of sensory information in vision, hearing, touch, taste, and smell.Examines psychophysics and the influence of personalityand environmental factors in human perception. Examines neuropsychologyand perceptualabnormalities resulting frombraindamage. Prerequisites: NEUR 125 and PSYC 121. Spring.
PSYC356Industrial Psychology (3) Examines personnel psychology, organizational psychology, and human factors psychology. Topics includejobanalysis,recruiting,testing, performanceappraisal,leadership,motivation, person-machinesystems,workspacedesign, and stress in the workplace. Prerequisites: Psychology 121; 229. Spring alternate years.
PSYC 357 Neuropsychology (3) Examines the function and organization of the nervous system and the role of the nervous system in controlling behavior. Topics include nervous system structure and functionsasitrelatestosensoryprocessing,movement,sleep,reproductive behavior, emotional behavior, learning and memory, stress and health, neurological disorders, and select psychiatric disorders. Current research methodology and experimental findings emphasized. Prerequisites: Biology 100 or higher; Psychology 121. Fall.
PSYC 358 Neuropsychology Lab (1) Laboratory course introduces techniquesand paradigmsofphysiologicalpsychologyandbehavioral neuroscience.Scientificreportwriting, problemsofresearchdesign, and data analysis emphasized. Two-hour laboratory. Prerequisites: NEUR 125 and PSYC 121. Fall.
PSYC 365 Applied Creativity and Design Thinking (3) This course
will explore the concepts of design thinking and apply them to complexproblems.Knowledgeandskillsaredevelopedinempathy, problem-definition,ideation,rapid-prototyping,andexperimentation to foster innovation. Students will utilize collaborative, cross-disci-plinaryapproachesandcreativeproblem-solvingstrategiestotackle multi-faceted problems and develop innovative solutions.
PSYC 366 Cognitive Psychology (3) The study of how we think. Examinesthecognitiveprocessesunderlyingattention, perception, memory,language,reasoning,and problem-solving.Emphasisontheoreticalmodelsandexperimentalfindings.Exploresareasofapplied cognitive psychology. Prerequisites: Psychology 121, 125. Fall
PSYC 367 Theories of Personality and Psychotherapy (3) Survey of majorcontemporarymodelsofpersonalityandindividual psychotherapy. Includes biological, psychoanalytical, humanistic, behavioral, andcognitivemodels. Prerequisites: 12 hours of psychology, including Psychology 121, 259. Spring.
PSYC 370 Behavior Modification (3) Studies learning principles as a meansforchangingbehaviorinthehome,school,mental healthsettings, andothersocialsituations.Operant, respondent, andcognitive techniquesreviewedintermsofdoingtherapy,increasingself-control, and improving productivity in industry. Focus on modifying both child and adult behavior. Prerequisites: Psychology 121, 259. Fall.
PSYC 379 Child and Family Psychotherapy (3) Survey of theories andtechniquesofthemostpopularapproachestopsychotherapywith children, adolescents, andtheirfamilies. Coversindividual therapies such as play, cognitive, and behavior therapies, as well as group and familytherapies.Particularattentiongiventointerviewingskills.Prerequisites:Psychology 121 andeither Psychology 225 or 226.Spring. PSYC401 IndependentStudy-Psychology(1)Providesopportunities for study of subject areas in greater depth. The study is conducted with theguidanceandsupervision ofadepartmentfaculty member. Proposed independent studies should be presented to the departmentatleastsixweeks beforethebeginning ofthetermandmustbe approved before registration for the course. May be repeated given substantiallydifferentcontent.StudentscannotenrollinPsychology 401 forresearchintoatopic that is offeredasastandardcourse within thedepartment.Prerequisites: 15 hours of psychologyandsponsorship by the supervising faculty member. Fall, spring, summer.
PSYC 402 Ungraduate Research in Psychology (1) Provides opportunities for undergraduate research that involve data collection and formal reporting concerning a specific problem. This research is conducted with the guidance and supervision of a department facultymember.Proposedindependentstudiesshouldbepresentedto the department chair at least six weeks before the beginning of the term,includeadetailed prospectusoftheproblemandmethodology, including documentation of IRB approval, and must be approved by thedepartmentbeforeregistrationforcoursecredit.Mayberepeated for a maximum of 9 hours. Prerequisite: Psychology 121, 245, 246, and sponsorship by the supervising faculty member. Fall, spring, summer.
PSYC 405 Special Topics in Psychology (3) Examines specific topics in psychology through a seminar or workshop format. Prerequisite: Psychology 121 or permission of instructor.
PSYC 416 Human Sexuality (3) Covers topics related to human sexuality.Includessexualityresearch, anatomy,sexualdevelopment, sexual identity and orientation, sexual activity, contraception, sexuallytransmittedinfections,loveandrelationship,sexandthelaw,and cross-cultural differences. Exposes students to knowledge and attitudesabouthumansexualityandchallengesthemtomakeinformed, ethical choices. Prerequisites: Psychology 121, 229; at least junior standing. Summer, offered periodically.

PSYC 420 Children, Psychology and the Law (3) Introduces students to the major topics represented in the field of children, psychology, andlaw.Examineshowpsychologicalresearch(acrosssub-disciplines such as social, clinical, cognitive, and community psychology) can contributetoabetterunderstanding ofspecial issuesthatarisewhen children enterthe legal system-a system designed for adults.Topics include the nature of and societal response to child maltreatment, thereliability ofchildren'seyewitnesstestimony,jurors'perceptions of children'stestimony, andjuvenilejustice. This course reviews how psychologicalresearchcancontributetoabetterunderstandingofthe issues, howthelegal system canbeinformedbytheresultsofresearch, and how to design future research to address remaining questions. Prerequisite: PSYC 229, 246, or SOC 235.
PSYC 426 Advanced Child and Adolescent Development (3) Examines developmental stages from conception through adolescence, giving special emphasisto physical, cognitive, social, andemotional aspects related to maturational as well as learning processes. This course builds upon Psychology 226 (Child and Adolescent Psychology) but delves further into each topic so that each student gains a greater appreciation for and understanding of the concepts and processesinvolvedinthedevelopmentofchildren.Prerequisites:Psychology226oradmissionintoamaster's programorpermissionofthe instructor. Summer, offered periodically.
PSYC 431 Stereotyping, Racism, and Prejudice (3) Introduces the studenttothepsychologicaltheoryandresearch concerningstereotyping, prejudice, racism, and the effects of social stigma on self and society.Examineshowstereotypes, prejudice, andracismareformed, maintained,andreduced.Analyzes prejudicetowarddifferentsocial groups,includingthoseformedbyracialandethnicorigins, gaysand lesbians, women and men, and overweight and physically different individuals. Prerequisite: one of the following courses: PSYC 229, 245, 246, SOC 235 or 344.
PSYC 445 Psychological Tests and Measurements (3) Studies the theory, construction, administration, andinterpretation ofstandardized psychological tests used in educational, clinical, and industrial settings.Examinesachievement,intelligence, aptitude,interest, and personalitytests. Prerequisite:Psychology 121,245,orpermission of instructor. Offered periodically.
PSYC 450 Learning (3) Examines neurological, environmental, and cognitive factors that influence acquisition and retention of new information or new behaviors. Emphasis on historical theories of classical and instrumental conditioning and how they relate to stimulus control of behavior and animal cognition, including memory. Exploresareas ofappliedlearning.Learningconceptsreinforcedwith interaction with a virtual reality program. Prerequisites:Psychology 121, 246. Spring, alternate years.
PSYC 464 Psycholinguistics (3) Introduction to psycholinguistics providing overview of language processes including speech perception, meaning representation, language processing, language production and comprehension, and language acquisition. Details theoretical linguistic concepts and their empirical support data. Examines language related to brain, thought, and reading. Prerequisite: Psychology 121. Recommended: Psychology 366. Summer, offered periodically.
PSYC 466 Cognitive Development (3) Examines development of cognitive skills from birth through adolescence with emphasis on memory, attention, perception,language, and problemsolvingskills. Discusses major theories of cognitive development with focus on experimentalfindings.Therelationshipbetweenbiologicalchanges andcognitiveabilitiesexploredasistheinfluenceofneurologicaland physiological impairments. Impact of cognitive skills on academic abilities and performance also discussed. Prerequisites:Psychology

121, 226. Recommended: Psychology 366. Spring, alternate years. PSYC 489 Field Experience: Internship in Psychology (1) Provides work experience in a preferred field of psychology. Features work experience in area clinics, agencies, schools, and other institutions under guidance of professional personnel. Weekly class discussions focusonongoingexperiences and professional developmentissues. May be repeated for a maximum of nine hours. Prerequisites: Senior psychologyorneurosciencemajors;mustmeetwiththeinstructorat least one month before semester begins to arrange placement. Fall, spring.
PSYC 490 Senior Review and Senior Thesis (3) Reviews contempo-rarypsychologythroughreadings,studentpresentations,anddiscussions.Preparationforthecomprehensiveexaminationinpsychology. Provides supervision of the senior thesis, which must include a thoroughliteraturereviewofatopicrelevanttopersonalgoals.Thesismay include but does not require original research. Prerequisite: Senior psychology or neuroscience major. Fall.

## Public Health (PH)

PublicHealth coursesaretaughtbythefaculty oftheSchool ofPublic Health.

PH 190 Intro to Public Health (3) Introduces students to the concepts, principles, andoutcomes of publichealth.Students willexplore theories of health, illness behavior, and health education considering community health data sources, classical health intervention approaches, and the planning and evaluation of community health interventions.Course providesbasicknowledgeandskillsneededfor conductingcommunityneedsassessmentwithdiversepopulations. Additional topics such as infectious diseases, environmental health, chronic diseases, maternal and child health and women's health are also covered.
PH 195 Global Health Issues (3) Provides an overview of important health problems of the world's populations, including improving health globally, reducing health disparities and examining key areas of disease burden. Particularattention will be paid to health status of women, children and the poor.
PH 340 Public Health Nutrition (3) This course focuses on food and nutrition problems in the setting of the general community. The course is designed to provide students with an understanding of theoretical and practical issues underpinning population-level assessment in nutrition and an appreciation of nutrition within the broadercontextofpublichealth.Specifictopicsincludethederivation andapplication ofnutrientrequirementestimates and nutrition recommendations, themeasurementoffoodintakeandfoodinsecurity, currentissuesandcontroversiesinfood policy, andthedevelopment ofindividualvs.population-basedinterventionstrategies. Prerequisite: Public Health 190.
PH 360 Community Health and Social Justice (3) Provides an overview of the major health issues influencing quality of human life. Topics include individual and social planning for optimal health. Prerequisite: $\mathrm{PH}-190$ or permission of instructor.
PH 400 Food Science (3) Knowledge of basic groups of foods in the food supply and their nutrient profiles, their harvesting, processing andstorageproceduresand policies.Thiscoursewill providestudents a broad overview of certain aspects of the food supply both locally andworldwideand willexamineissuesaffectingfoodsafetyincluding someofthemechanismsbywhichfood-bornepathogensthatcause diseaseinhumans,aswellasthehumanconsequencesofinfectionby major food-borne pathogens. Prerequisites: Public Health 190.
PH 401 Epidemiology (3) Introduces students to epidemiology and epidemiological methods. Students will explore study designs and
measures of effect used to study disease in human populations, as wellas concepts ofcausal inferenceand threats tostudyvalidity.This course will prepare students to critically evaluate public health and medicalliteraturebasedonthemajorcriteriausedtoassesscausality.
PH 409 Environmental Health (3) Environmental health is concerned with the biological chemical, and physical influences on humanhealth. Thecoursewillexaminetopicssuchasenvironmental health determinants, generalmechanisms oftoxicity, genetic, physiologic, and psychosocial factors related to environmental health, environmentalriskassessmentmethods,federalandstateregulatory guidelinesand programs, environmentaljustice,riskcommunication, and prevention and management of environmental hazards. Fall.
PH 415 Health Behavior (3) Health Behavior Change is an overview of the health behaviors contributing most dramatically to increased morbidity and mortality in the United States. The course emphasizespublichealthinterventions, theoreticalmodelsandstrategiesto promotehealthybehaviorsanddiscourageunhealthybehaviors. The course examines consequences, patterns, risk factors, and change/ interventionsforeachbehaviororproblem.Behaviorsareexamined from multiple perspectives (e.g., individual, social, environmental) and with a systems perspective in mind, illuminating the interconnecting influences on behaviors. Health behaviors and behavior changeinterventionsarepresentedinthecontextofcurrentresearch and theory. The course also examines the role of health disparities, public health policy, current debate, health behavior theory and emerging research. Fall.
PH 425 Biostatistics (3) This course will cover biostatistical methods andapplications relatedto publichealth. Topicswillincludedescriptive statistics, probability theory, and a wide variety of inferential statisticaltechniques that can be used to make practical conclusions about empirical data. Learned statistical knowledge will be applied to understanding and designing research studies.
PH 467 Statistics Appraisal and Evaluation (3) Focuses on the analysis ofdatacommontohealth care.Includesdatadescription,elements of probability, distribution of random variables, estimation and confidence intervals, binomialandnormaldistributions, hypothesis testing, contingency tables, regression analysis, and ANOVA.
PH 480 Programs, Problems, and Policies in Public Health (3) This courseexaminesthemyriad ofprograms and policies in publichealth viaadevelopmentalapproachtolearningabouthealthproblems. The course will cover a variety of topics, including state programs and policies, maternal and infant health, program planning, research, monitoring, and advocacy.
PH 488 Internship (1) Offers the public health major practical experienceina specializedcareerarea.Fostersdevelopmentofskills,competencies, andorganizationalandadministrativetechniquesneeded for successful entry into the public health workforce or entry into a professionalgraduate program, whileworkingunderdirectsupervision of selected professionals.
PH 490 Integrative Experience (3) Examines decision making in health services administration by extensive use of case studies. Integrates material from other HSA courses into the study of decisions facing all types of health care organizations.
PH 499 Special Topics Public Health (1) Study of topics of special interest not covered in regular course offerings. Topics announced. Coursemayberepeated,buthetopicmustbedifferent.Prerequisite: Permission of instructor.

## Quantitative Methods (QM)

Quantitative methods courses are taught by the faculty of the Department of Accounting and BusinessAdministration.Allcourses
are subject to the leveling policy and prerequisite requirements of the Schroeder Family School of Business Administration. See the "SchroederFamilySchool ofBusiness Administration" section ofthis catalog for the complete leveling policy.
QM 160 Introduction to Data Analytics (3) This course is an introductiontodataanalysisandmanagement.Itincludes comprehensive introduction to Microsoft Excel and a brief treatment of Microsoft Access. Excel topics include formatting workbook text and data; implementationofdesignedfunctions;analysisandchartingoffinancialdata;application oftables, pivottablesandtablecharts;managing multipleworksheetsandworkbooks;validationanddevelopmentof macros; nested commands and other advanced functions; financial tools and functions; scenario analysis; retrieval and importation of externaldata;anddescriptivestatisticalanalysis.Accesstopicsinclude a brief introduction to database techniques.
QM 227 Introduction to Statistics (3) General purpose introduction to principles of analysis and inference under conditions of uncertainty. Focuses on the logic of statistical inference. Topics include probability, probability distributions, random variables, sampling and sampling distributions, estimation, hypothesis testing, and linear regression and correlation. Prerequisite: Proficiency in algebra at introductory level. Credit not given for both QM 227 and either PSYC 245 or SOC 344.

QM 327 Statistical Methods (3) This is a second course in applied statistics. It uses basic principles of statistical inference to introduce studentsto categorical data analysis, analysis of varianceand design ofexperiments,regressionmodelingandbasicextensionsofregression analysis. Possible additional topics include nonparametric statistics, methods for quality control, and introduction to multivariate methods. With emphasis on applications of statistical analysis, this courseisappropriateforstudentsinavarietyofmajors,rangingfrom business and economics to health and life sciences, social sciences, andexercisescience.Offeredinalternateyears.Prerequisite:Gradeof C- or better in QM 227.
QM 380 Special Topics in Quantitative Methods (3) Covers topics not included in other courses; gives greater depth in certain areas; explores current quantitative methods topics. Repeatable course. Contentchangeseachtime course is offered.Prerequisites:Grade of C- or better in QM 227. Offered periodically.

## Race and Ethnicity Studies (RES)

Race and Ethnicity Studies courses are taught by faculty of several departments.
RES 492 Special Topics: Race and Ethnicity Studies (3) Special topics in race and ethnicitystudies notincluded in regularcourseofferings. Mayconsistoflectures anddiscussion with anemphasis on research. Content changes each time course is offered. Repeatable up to six credit hours.

RES 493 Independent Study in Race and Ethnicity Studies (3) Research in areas of race and ethnicity studies on topics not covered in existing courses.Subjectand creditearnedmustbeapproved bya facultymember, coordinatorofRaceandEthnicityStudies, anddean oftheCollegeofArtsandSciences.Contentchangeseachtimecourse is offered. Repeatable up to six credit hours. Pre-requisite: junior standing or permission of coordinator of Race and Ethnicity Studies.

## Religion (REL)

Religion courses are taught by the faculty of the Department of Philosophy and Religion.
REL 120 Religion in America (3) This course examines mutually intersectingthemes and influences between religion and American
culture.Topics vary andmay include, for example, religious diversity in America, American religious history, the intersection of religion with American politics and cultural debates.
REL 125 Religion and Science (3) This course introduces students to the interaction of religion and science, covering historical, theological,philosophicalandscientificaspects.Itexplorescontemporary issues concerning the origins of the universe, the meaning oflife, the "anthropic principle," and other such topics.
REL 130 Christian Thought (3) Introduces themes of Christian thought in historical and contemporary perspectives.
REL 140 Reading the Old Testament (3) Engages select passages from the Old Testament, examining their historical context, place in the Bible, textual features, and a wide variety of subsequent interpretations. Focus is on developing basic skills for reading the Old Testament.
REL 150 Introduction to the New Testament (3) Introduces the New Testament, its background, content, andmajorthemes. Exploresthe ancient world and the life of the first Christian communities in order to illumine the New Testament texts. Emphasis on key topics of theology and interpretation and their contemporary relevance.
REL 201 Religious Ethics (3) Provides an introduction to religious moral thinking, paying attention to the basis, nature, content, and consequences of ethical thought and the religious traditions that address them. Includes a close study and discussion of various approachestoethicsasembeddedintheworld'smostwidespreadreligioustraditions (particularly Christianity, Judaism,Islam,Buddhism, Hinduism,etc.) as wellas ananalysis ofselected contemporaryissues suchasviolenceandwar,euthanasia, abortion, sexuality, andracism.
REL 205 Everyday Islam in the West (3) This course examines some of the major theories in the study of the lived religion through the lens of everyday experiences and practices of Muslim in the "West".
REL 212 Living World Religions (3) Comparative study of the origin, development, literature,organization, and controllingideasofmajor world religions.

REL 220 Reformers and Revolutionaries in Christian History (3) Examines key issues in the history of Christian thought through study of significant figures in late medieval and modern Christian history. Examples of theologians covered include Anselm, Thomas Aquinas, Julian of Norwich, Martin Luther, John Calvin, Teresa of Avila, Anne Hutchinson, and Jonathan Edwards
REL 240 Philosophy of Religion (3) Examines mutually intersecting themes and influences between Western philosophy and religion fromantiquitytothepresentday.Sampletopicsincludethenatureof religious experience,claimstoreligiousknowledge,therelationship between faith and reason, etc.
REL 275 Race and Religion (3) This course introduces students to the complex intersection of race and religion in America. We will examine the role of religion in constructing ideas about race and in supporting racialized powerinequities.Furthermore, we willexplore ways religionhasbeenshaped byminority communities in response to racial realities in America.
REL 305 Bible and Justice (3) Explores the Bible's relationship to contemporary social justice issues. Topics include issues linked to social identity (race, class, gender, sexuality, etc.) as well as global diversity (poverty, globalization, human rights).
REL 310 Contemporary Theologies (3) Examines major Christian theologiesofthe 19thand20th centuries, including neo-orthodoxy, liberalism, existentialism, processtheology,globaltheology,andfeminist, Latin American, African American, and Asian liberation theol-
ogies.Prerequisite:Onecourseinreligionorpermission ofinstructor.
REL 314 Religions of East Asia (3) Studies the texts, thought, and practices of the religions of East Asia, specifically China and Japan, including Confucianism, Daoism, Shinto, and Buddhism. Prerequisite: sophomore standing.
REL 315 Jews, Christians, Muslims (3) Examines the three religious traditionsthattracetheirheritageto Abraham:Judaism,Christianity, and Islam. Prerequisite: sophomore standing.
REL 320 Jesus and the Gospels (3) Studies the Gospel texts, explores issues and options of interpretation, and engages the key issues of modern scholarly debate concerning the Gospels. Emphasis on the use of contemporary methods of Biblical exegesis to illumine the Gospel texts. Prerequisite: Junior or Senior standing, or permission of instructor.
REL 325 Ancient Christianity (3) Traces the history of Christianity from the Apostolic Fathers at the close of the first century until the earlymedieval period.Emphasisonthelife,theology,spirituality, and expansion of the early Church, with special attention to Christianity in ancient Roman and Saxon Britain. Prerequisite: FYS 112.
REL 330 Paul and His Letters (3) Studies key themes of Paul's letters a illumined by contemporary study of Paul. Special attention given to the place of Paul within the history of ancient Christianity, and to core features of Christian theology and practice shaped by Paul's letters. Prerequisite: junior or senior standing.
REL 335 Biblical Narratives (3) Examines theory and practice of biblical interpretation through in-depth study of select biblical narratives, including the Joseph Story, the Succession Narrative (King David), the books of Ruth, Jonah, Daniel, Esther, Tobit, and Judith. Specialattentiongiventoliteraryapproachesandtheologicalissues.
REL 340 Women and Religion (3) Examines women's religious thoughtinhistoricalorcontemporarysettings.Exploreshowwomen's sense of self-identity and their social position shaped their unique theological perspectives.
REL 345 Religion and Story (3) This course explores the role of story as a means of communicating religious truth claims. Students willexamineselectedreligiousthemespresentedand/orchallenged innovelsandfilmsrepresentingdiversesocio-religiousperspectives. Topics include, for example, faith, human nature, good and evil, redemption, and what is ultimate. Prerequisite: One course in religion or permission of instructor.
REL 350 God, Suffering and Evil (3) How can God be all-good and all-powerfulifevilexists?Theclassicquestion oftheodicyguidesthis course, with a study of classic and contemporary attempts to deal withtheproblem ofevil.This courseexplores how peopleinreligious traditions have thought about and lived in relation to evil and the experiences ofsuffering.Sustainedfocusononetopicenablesstudents to practice critical thinking in the study of philosophy and religion. Prerequisite: FYS-112.
REL 375 Religion, Gender, and Culture (3) This course uses gender asacategoryofanalysistostudyreligion.Topics varyandmayinclude suchthingsastheconnectionbetweenreligiousnotionsofgenderand largersocial,political,andeconomicissues;representativeinterpretive traditions of religious texts and figures in literature and art; or constructions of gender in major world religions.
REL 380 Topics in Religious Studies (3) Content changes each time course is offered. Repeatable course.Prerequisite:Onecourse in religion or permission of instructor.
REL 431 Prophets (3) Examines Old Testament prophets in light of their historical, social, political, and religious backgrounds. Taught as a seminar. Prerequisite: One course in religion or permission of
instructor.
REL 435 Biblical Languages Practicum (1) Provides opportunity to employ Greek or Hebrew skills and tools in biblical interpretation andexegetical research.Usuallytakeninconjunction with one ofthe following: Religion 320, 330, 335, or 431. Repeatable course. Contentchangeseachtimecourseis offered. Repeatableuptofourcredit hours. Prerequisite: Greek 211 or Hebrew 112.
REL 445 Religion, Peace and Justice (3) Provides in-depth engagement with religious approaches to ethical concerns in the social sphere,especiallyrelatedtoquestionsofwarand peace,violenceand nonviolence,andeconomicandsocialjustice.Predominantlyfocused on the Christian tradition, the course will also include engagement with significantfiguresinselected other religioustraditions.Prerequisite: One course in religion (preferably Religion 201) or permission of instructor.
REL 481 Directed Study in Religion (1) Offers research in special problemsorpersons under the direction of a member ofthe religion faculty. Contentchangeseachtimecourseisoffered.Mayberepeated for up to nine hours. Prerequisite: Permission of instructor.
REL 492 Religion Internship (1) Supervised field experience in church or other house of worship, nonprofit organization, or similar area of direct relevance to a religion major.
REL 495 Capstone Experience in Religion (1) A one credit hour course that must be taken in conjunction with an approved 300 or 400 level religion course in ordertomeet thegeneral educationcapstone requirement.

## Russian (RUSS)

Russian courses are taught by the faculty of the Department of Foreign Languages and Cultures.
RUSS 111 Elementary Russian I (3) Emphasizes practice in grammar, speaking, listening, writing, reading, and cultural awareness.
RUSS 112 Elementary Russian II (3) Emphasizes practice in grammar, speaking, listening, writing, reading, and cultural awareness.

RUSS 211 Intermediate Russian I (3) Continues practice in grammar, speaking, listening, writing, reading, and cultural awareness.

RUSS 212 Intermediate Russian II (3) Continues practice in grammar, speaking, listening, writing, reading, and cultural awareness.
RUSS 311 Third Year Russian I (3) Continued study of Russian grammar with attention to participles and prefixed verbs of motion. Regularworkonspeaking,vocabulary, andreading comprehension.
RUSS 312 Third Year Russian II (3) Continued study of Russian grammar with attention to participles and prefixed verbs of motion. Regularworkonspeaking, vocabulary, andreading comprehension.
RUSS 330 Independent Study in Russian (1) Topics and credit hours must be prearranged with instructor. May be repeated with content change.

RUSS 333 Russian Culture (3) Broad survey of Russian culture. Includes geography, history, folkculture, literature, art, religion, and music up to the Bolshevik Revolution in 1917. Taught in English. Alternate years. No prerequisites.
RUSS 334 Soviet and Post-Soviet Russian Civilization (3) This course is a continuation of Russian 333. As with Russian 333, this course covers a wide range of topics relating to Russia from the Bolshevik Revolution to the present day: a basic overview of history, various social issues, and culture - from literature, art, music, cinema, and architecture to everyday life and popular culture. Taught in English;
no knowledge of Russian language required. Prerequisite: RUSS 333 or permission of instructor.
RUSS 335 Foreign Language Study Abroad (1) Foreign Language Study Abroad. Repeatable with content change.

## Social Work (SW)

Social work courses are taught by the faculty of the Department of Law, Politics, and Society.
SW 120 Introduction to Social Work (3) Introduces profession of socialwork.Focusesonthehistoricalevolution oftheprofessionand its role in modern society.

## Sociology (SOC)

SociologycoursesaretaughtbythefacultyoftheDepartmentofLaw, Politics, and Society.

SOC 105 Introduction to Sociology (3) Introduces major concepts used by sociologists to understand and predict the behavior of individuals in group settings.
SOC 201 Professional Development in Sociology (1) This course is aprofessionalorientationforvariousinternshipopportunities,career pathways, and graduateschool options available inthediscipline.In addition, the course serves as an introduction to academic writing, ethics, and research in sociology.
SOC 210 Deviance and Crime (3) Examines deviance and crime throughanumberofsociological, psychological, andcriminological perspectives.
SOC 230 Social Problems in the Modern World (3) Focuses on major social,economic, political, andenvironmental issuesconfrontingthe modern world. Covers both global and U.S. issues.

SOC 327 Human Behavior in the Social Environment (3) A sociologicalsocial psychologycourse.Exploressocialinteraction,selective perception, human symbolic behavior, language, social structure, emotions, perceptions and memory, sexuality, development of self, identity, aging, and deviance. Prerequisite: SOC 105 or permission of instructor.

SOC 330 Community Organization (3) Explores the basics of communityorganizationanddevelopment, with specialattentionto urbanized areas. Prerequisite: SOC 105 or SOC 230; or permission of instructor.

SOC 335 Marriage and Family (3) Designed to give an in-depth look at changing courtship, martial, and family patterns in America over the course of the last century. Studies the history and importance of the family as a social institution, and the different forms and configurations of the family found in modern America. Prerequisite: SOC 105 or SOC 230; or permission of instructor.
SOC 337 Social Aspects of Health and Health Care (3) Examines the nonbiological aspects of health and health care. Topics include socialdefinitionsofhealth, professionalizationinthehealthindustry, patient-practitionerrelationships,andtheorganization ofhealthcare systems in the United States and other countries. Prerequisite: SOC 105, SOC 230, PH 190, or PH 195; or permission of instructor.
SOC 343 Social Research Methods (4) Covers both quantitative and qualitative sociological research methods. Topics include the relationshipbetweentheoryandresearch, conceptualization,operationalization,hypothesis, andmodeldevelopmentandsampling.Specific datagatheringtechniquescoveredincludesurveydesigns,field studies,secondaryanalysis,unobtrusivemeasures, andexperimental techniques. Discusses ethical issues and responsibilities in social scienceresearchandthelimitsofthescientificmethodinsocial science. Prerequisites: Sociology or criminal justice major or permission of
instructor
SOC 344 Introduction to Behavioral Statistics (4) Recommended for studentsdesiringanintroductorystatisticscoursewhichemphasizes application and interpretation. Covers basic statistical techniques usedinbehavioral research.Studiesfrequentlyused descriptiveand inferentialstatisticswithemphasisontheinterpretationofquantitative dataandstatistical reasoninginbehavioralresearch.Prerequisite:SOC 343andcriminaljusticeorsociologymajororpermission ofinstructor.
SOC 350 Popular Culture (3) Examines the sociological impact of popularculturebyexploringrace,class, gender,sexuality, andfamily throughtheculturallensoffilm,television, andmusic.Topicsinclude the changing portrayals of race, class, gender, sexuality, and family across the last century in reflecting cultural values and ideals, and theirreciprocalinfluenceoncultureandAmericanidentity.Prerequisite: SOC 105 or SOC 230; or permission of instructor.
SOC 370 Advanced Topics in Sociology (1) Intensive analysis of sociological topics not covered in regular course offerings. Provides greaterdepthtotopics ofspecial interestorexploreschangingareas ofsociologicalstudy.Repeatablecourseupto3credithours;content changes each time course is offered. Prerequisites:SOC 105 andSOC 230; or permission of instructor.
SOC 371 Love and Attraction (1) Examines the theoretical frameworksandresearchfindingsonhumansocialrelationships,exploring the social norms, values, attitudes, and behaviors of love and attraction. Topics include: the social construction of love and attraction, cross-historicaldefinitionsoflove,acceptableformsoflove,problematicaspects ofloveandattraction, the developmentofinterpersonal attraction, intimacy, and attachment styles. Prerequisites: SOC 105 and SOC 230; or permission of instructor.
SOC 372 Qualitative Interviewing Skills (1) Intensive methodological training in qualitative interviewing with a focus on skill developmentandexperientiallearningininterviewtechniques.Prerequisites: SOC 105, SOC 230 and junior or senior standing; or permission of instructor.
SOC 380 Applied Research Lab (1) Provides opportunities for collaborativeundergraduateappliedresearchusingsociological research techniques to gather project-based information. This research is conducted with the guidance and supervision of a faculty member. Prerequisite:Sociology or criminal justice major, sponsorship by the supervisingfacultymember, andjuniororseniorstanding;orpermission of instructor.

SOC 386 Death and Dying (3) Explores thanatology - the study of death - using a sociological lens. Examines how American society shapes attitudes and behaviors toward dying, death, and bereavement. Topics of study include: cultural traditions, rituals, practices, and attitudes toward death, self-awareness and value identification concerning death and dying, grief and bereavement, the impact of death and dying across the life span, and end-of-life planning. Prerequisites: SOC 105 or SOC 230 and junior or senior standing; or permission of instructor.
SOC 390 Principles of Sociological Theory (3) Examines classical and contemporary sociological theories, as well as micro- and mac-ro-sociological approaches.Generaltheoreticalframeworks include constructionism,functionalism, conflicttheory,feminism, symbolic interactionism, postmodernism, network analysis, and integrated theories. Prerequisites: SOC 105 or SOC 230 and junior or senior standing; or permission of instructor.
SOC 415 Globalization and the Environment (3) Examines the changingdemographicsofourworldandhowtheyimpactthesocial, economic,environmental, and politicalrelationshipsbetweencountries. Explores the transformation to a global society and the basic
concepts of globalization, as well as how the relationships between human societies and the larger natural environment are affected by demographic pressures and global needs. Prerequisites: Junior or senior standing; or permission of instructor.
SOC 435 Sex, Gender, and Sexualities (3) This course explores the social norms, values, and expectations that influence - and are influenced by-attitudes,beliefs, and behaviorsregardinggenderand sexuality. The course examines the different and changing cultural understandingsofgenderrolesandsexuality, andthesocialconstruction of both. Prerequisite: SOC 105 or SOC 230 and junior or senior standing; or permission of instructor.
SOC 438 Race and Ethnic Relations (3) Studies the sociology of United States and global minority and ethnic relations. Examines class, ethnic, gender, andracialstratification, and powerandinequality. Analyzes patterns of ethnic integration and multiculturalism. Detailsthesocialandpsychologicaldimensionsofdiscriminationand prejudice, as well as racial and ethnic conflict and accommodation. Prerequisite: SOC 105 or SOC 230; or permission of instructor.
SOC 450 Senior Seminar in Sociology (3) Capstone educational experienceinsociology,offeringstudentstheopportunitytousetheir substantiveandmethodologicaltrainingtocompleteandpresentan original research project. Prerequisites: SOC 343, 344 and criminal justice or sociology major; or permission of instructor.
SOC 460 Aging and Society (3) Recommended for any student desiring a thorough introduction to gerontology. Examines the social response to aging in American society and in other countries. Emphasis onthe roles ofelders inthefamilial, religious, political, and economic institutions. Prerequisite: SOC 105 or SOC 230 and junior or senior standing; or permission of instructor.
SOC480UndergraduateResearch inSociology (1-2) Providesopportunitiesforundergraduateresearchthatinvolveliteraturereview, data collection, analysis, andformal reporting.This researchisconducted withtheguidanceandsupervision ofadepartmentfacultymember. May be repeated for a maximum of 2 hours. Prerequisites: Junior or senior standing; or permission of instructor; sponsorship by the supervising faculty member.
SOC 494 Directed Study (3) Provides opportunity for specialized advanced study. Prerequisite: Permission of instructor.

SOC 496 Internship (1-2) Internships available to majors of junior or seniorstandingwhohavecompletedcorecourses.GPArequirements must be met and student must file an internship application with advisor.
SOC 497 Internship in Teaching Sociology (1-2) Provides majors of junior or senior standing with a comprehensive, supervised field experienceinteachingandsociological pedagogy.Designedforstudentswhoarepreparingforgraduatestudyinthesocialsciences.GPA requirements must be met and students must file a teaching intern-shipapplicationwithadvisor.Prerequisites:Sociologymajor,sponsorship by the supervising faculty member,junior orsenior standing, or permission of instructor. (1-2 credits).

## Spanish (SPAN)

Spanish courses are taught by the faculty of the Department of Foreign Languages and Cultures. All courses are taught in the target languageunlessotherwisenoted.Prerequisite:CompletionofSpanish 312 for all 300-level courses or above.
SPAN 111 Elementary Spanish I (3) Emphasizes practice in speaking, listening, writing, reading, and cultural awareness.
SPAN 112 Elementary Spanish II (3) Emphasizes practice in speaking, listening, writing, reading, and cultural awareness.

SPAN 211 Intermediate Spanish I (3) Continues practice in speaking, listening, writing, reading and cultural awareness.
SPAN 212 Intermediate Spanish II (3) Continues practice in speaking, listening, writing, reading and cultural awareness.
SPAN 312 Conversation and Composition (3) Focuses on the process anddevelopmentofeffectivewritingskillsandexpressioninSpanish. This course is a prerequisite for all 300/400-level Spanish courses. Prerequisite: SPAN-212.
SPAN 314 Business Spanish (3) This course provides specialized vocabulary, idiomatic expressions, communication patterns, and common practices in Hispanic societies and settings in the world of business and commerce. This course is recommendedforthosewho wishtoapplytheir knowledgeofSpanish in business careers. Taught in Spanish. Prerequisite: SPAN-312.
SPAN 317 Intro to Spanish-English Translation (3) This course will explorethebasicprinciples oftranslationandinterpretation,thetheory, the methods, the challenges, the problems and the satisfaction involved in rendering both written texts and oral statements from SpanishintoEnglishandvice-versawithoutlosingthebasicideas, the intent,thestylisticlevel, andthelinguisticregister.Theemphasisison generalmaterialtakenfromjournals, newspapers,electronicmedia, governmentpublications,pre-recordedaudioandvideospeechesand dialogues, andlive presentationswithsomeconsiderationofspecializedmaterialfromthefieldsofbusiness, literature,medicine,agriculture,biodiversityandsustainability, politicalscience,advertisement, law, informationtechnology, and sports. Emphasis will be placed on translating fromSpanishtoEnglish, withsomeconsiderationgivento English-Spanish translation. Prerequisite: SPAN-312.
SPAN 320 Social Issues in Hispanic Society (3) Introduces specific social, ideological, and philosophicalissuespertinenttotheHispanic world in Spain, Latin America, and United States. Prerequisite: SPAN-312.
SPAN 321 Introduction to Hispanic Literature (3) This course focuses on reading andanalyzingtexts by Hispanic (SpainandSpanish America) authors of various literary genres. Students study basic literary terms, concepts, methods, techniques, and movements to analyze and interpret literary texts. Students will develop aural, oral, reading, and writing skills, and deepen understanding of Hispanic culture and society. Taught in Spanish. Prerequisite: SPAN-312.
SPAN 325 Medical Spanish I (3) Focuses on medical terminology. Thecourseintroducessituationalvocabulary, anatomical structures andtheirbasicfunctions, andmedical andclericalterms usedinclinicalsettings.Especiallyrecommendedforstudentsconsideringcareers inhealthcare,healthservices, publichealth, andteaching professions. Prerequisite: SPAN-312.
SPAN 330 Independent Study (1) Course content and credit hours determined in consultation with the instructor. Course may be repeated with contentchange.Prerequisite:Spanish311 orpermission of instructor. Department chair approval is required. Prerequisite: SPAN-312.
SPAN 333 Introduction to Hispanic Culture (3) Introduces the various Hispanic cultures found in Spain, Latin America, and United States. Prerequisite: SPAN-312.

SPAN 335 Foreign Lang Study Abroad (1) Foreign Language Study Abroad. Repeatable with content change. Prerequisite: SPAN-312.
SPAN 350 Medical Spanish II (3) This course covers medical terminology and focuses on concepts and practices to develop culturally responsive care by highlighting medical assessment and stressing aural/oral communication in clinical settings. This course includes Hispanic cultural elements and an introduction to medical interpre-
tation to prepare studentsfor potential careers in healthcare, health services, public health, and teaching professions. Taught in Spanish. Prerequisites: SPAN 312 and 325.
SPAN 410 Spanish Practical Phonetics: Pronunciation and Variation (3) Introduction to theory and practice of Spanish pronunciation, including dialectal and historical variation. Prerequisite: SPAN-312.
SPAN 411 Advanced Spanish Grammar (3) An advanced grammar course that will providestudents with the background necessary for moreadvancedcourses. The coursewillfocus oncontinuedmastery of the most difficult points of Spanish grammar. Prerequisite: SPAN 312 or permission of instructor.
SPAN 433 Hispanic Civilization (3) Studies history and culture of Spain and Latin America. Taught in Spanish. Prerequisite: SPAN312.

SPAN 435 Foreign Lang Study Abroad (1) Foreign Language Study Abroad. Repeatable with content change. Prerequisite: SPAN-312.
SPAN 438 Spanish Seminar (3) Topics vary. Generally covers outstanding Hispanic authors and literary works. Course may be repeated with content change. Prerequisite: SPAN-312.
SPAN 450 Introduction to Spanish Linguistics (3) Studies the structure of the Spanish language as well as to the way in which language is used in different social situations by different speakers, and its dialectical, historical, social, and contactsituations such as the situation of Spanish in the U.S. Prerequisite: SPAN-312.
SPAN 458 Introduction to Hispanic Pragmatics (3) Focuses on the way we convey meaning through communication. This meaning includesverbalandnon-verbalelementsandvariesdependingonthe context, the relationship between people talking, and many other socialfactors.Exploresthewaysinwhichcultureinterrelateswithand effectscommunicationprocesses,andmorespecificallythedynamics that arise in social interactions in the Hispanic culture. Examines variouselements relatedto pragmatics such ascommunicativeacts, politeness,andtheappropriateuseoflanguageinconductingspeech acts such as apologizing, requesting, complimenting, refusing, and thanking in Spanish. Prerequisite: SPAN-312.

## Statistics (STAT)

Statistics courses are taught by the faculty of the Department of Mathematics.
STAT 166 Introduction to R for Data Science (1) The course serves as an introduction to the statistical software program $R$ as it applies to the field of Data Science. This course will cover the importation, exploration, visualization, and transformation of data in $R$ as well as the communication of results using R. Prerequisite: MATH-105.
STAT 191 Special Topics in Elementary Statistics (0.5-3) Study of topics of special interest in statistical programming. Treats material not covered in other courses. Topics will be announced. May be repeated. Prerequisite: Will be announced when scheduled.
STAT 266 Introductory Statistics With R (3) This course serves as an introduction to the foundations and applications of statistics in the framework of the field of Data Science. Covering key aspects of data exploration, visualization, and traditional topics in statistical inference,thiscourseisapproachedthroughaproject-basedcurriculumusingopendatasourcesfromvariousareasofapplicationandthe open-source statistical software program R. Prerequisite:Grade of $C$ or better in STAT-166 or permission of instructor.
STAT 267 Experimental Design (3) The thoughtful design of an experimentprovidesthebestchanceofproducingmeaningful, defensible evidence to answer questions of interest. This course will cover theprocessofplanningawell-designedexperimenttocollectappro-
priatedatasuchthatananalysisusingstandardstatistical procedures results in valid and objective conclusions. Design methods will be applied andanalyzed using a standard statistical software program, such as R. Prerequisite: STAT-266.
STAT 291 Special Topics in Intermediate Statistics (0.5-3) Study of aspects or applications of statistics and/or experimental design not covered in STAT 266 or 267 . Topics will be announced. May be repeated. Prerequisite:STAT266;anyadditional prerequisites will be announced when scheduled.
STAT 300 Data Analysis in the Real World (3) This course is designedtoprovidestudentsanopportunitytoapply dataanalytics inarealworldcontext.Studentswilllearntoconductacompletedata analytics project, including understanding the context; collecting, organizing, visualizing, and analyzing the data; and communicating the findings to the client. Analysis will be supported using statistical software,includingR.Becauseitsoverarchinggoalsalignclosely with the university's ChangeLab program, this course may beofferedasa ChangeLabcourse.Becausethetopics(andthusthenecessarystatistical tools) will vary with each offering, this course may be repeated. Prerequisite: STAT-266.
STAT 361 Linear Models (3) Provides an in-depth look at linear regression models by considering both the theory of the linear model and the skills needed to conduct relevant analyses using the statistical software programR. Topics includeestimation, inference, diagnostics, transformations, variable selection, ANOVA, and abrief introduction to Generalized Linear Models. Prerequisites:STAT-266, MATH-341.
STAT 362 Machine Learning (3) Introduces Machine Learning and its core models and algorithms by examining techniques in both supervised and unsupervised learning. Algorithms under considerationareregression, decisiontrees, neuralnetworks, supportvector machines,andclusteringalgorithms.Conceptsandalgorithmswillbe implemented using the statistical software program R.Prerequisite: STAT-266.

STAT 391 Special Topics in Statistics (0.5-3) Covers topics not includedinothercoursestogivegreaterdepthincertainareasandto explorecurrentstatisticaltopics. Topics vary, may include advanced regressiontechniques, advancedmachinelearningtechniques,artificialintelligence,advancedtimeseries.Mayberepeated. Prerequisite: STAT 267; additional prerequisites will be announced when scheduled. Prerequisites will be announced when scheduled.
STAT 474 Techniques for Large Data Sets (3) This course treats methodologies and customized algorithms and tools for efficiently extracting, interpreting, and drawing inferences from very large datasets. It begins with an introduction of the Big Data problem and the limitations of applying standard statistical techniques to large datasets.ItdevelopsalgorithmsforBigDataanalysis-includingdata compression, indexing, andsummarization-and providesexperience in using Big Data-specific tools such as Map-Reduce and Hadoop in conjunctionwiththegeneral purposestatisticalsoftwareprogramR. Corequisite: CS-440. Prerequisite: STAT-266.
STAT 491 Special Topics in Advanced Statistics (0.5-3) In-depth exploration of a topic not covered in other courses. Topics vary, but mayincludeadvanceddatamining,textmining, andadvanceddata-basestructures.Mayberepeated.Prerequisites:STAT-361;additional prerequisites will be announced when scheduled.
STAT 493 Statistical Modeling (3) Encompasses the entire cycle of a data analysis project, including problem formulation, acquisition andcleaning ofdata,modelselection, andfitting, parameterestimation, interpretation, and reporting. Draws on multiple data analytic techniquesdevelopedacross anarray ofstatistics coursestoaddress
real-world problems. Involves team projects and a seminar format. Corequisites: STAT-362, MATH-466. Prerequisite: STAT-361.

## Teaching English as a Second Language (TESL)

TESL 200 Second Language Acquisition (3) TESL 200 introduces students to the field of second language acquisition (SLA), which is adisciplinefocusedonhow humanslearnadditionallanguagesafter they have learned their first; factors that contribute to the variability observedin ratesandoutcomes;and whatittakestoattainadvanced academiclanguageandliterarycompetenciesinalanguageotherthan the mother language.

TESL 301 English Teaching Grammar ESL/EFL Studnt (2) TESL 301 will provide a thorough grounding in the grammar of English and a variety of approaches and techniques for teaching English grammar. It will present English as both a set of rules and as a communicativeresourcesthatshouldbeexploredcriticallyandappliedin a context-specific manner. This course is a critical study of aspects of Modern English grammar important for the teaching of English as a Second ofForeignLanguage. Students will gain an understanding of themajorsyntacticandsemantic phenomenaimportantforteaching ESL/EFL, becomefamiliarwiththe practical andtheoreticalliterature onteaching Englishgrammar, participatein practicalexercises ofgrammar correction in writing with actual ESL students, and develop and compile classroom activities for teaching points of grammar.
TESL 302 Assessment in ESL/EFL (2) Addresses linguistic, sociocultural,psychological, andeducationalfactorsthataffectacademicdevelopmentofEnglishasanadditionallanguage.Groundedintheoretical and practicalaspectsofteachingsecondlanguage(L2) as anacademic languagetochildren,adolescents,andadults indiversecommunities, studentslearntoimplementeffectiveinstructional strategiesformeasuring attainment of L2 skills, students learn to design and conduct authenticassessments andtoadministerstandardizedassessments.
TESL 325 Developmental Linguistics (2) This course introduces studentstothenatureoflanguagedevelopmentininfancyandchildhood. It also examines cognitive, developmental, environmental, andphysiological influencesonlanguageskills.Theoriesoflanguage development,andtheirinfluencesonresearchandourunderstanding of children, will be discussed. Topics include perception of sounds, acquisitionofgrammar,firstandsecondlanguagelearning, anddevelopmentallanguagedisorders.Therelationshipbetweenlanguageskills andoveralldevelopment(social,cognitive,andbiological) willalsobe explored.
TESL 326 Principles and Methods in TESL (2) This course provides acomprehensiveoverviewofeffectiveEnglish-as-a-new-languagetechniquestothefundamentalsoflanguageacquisition.Designedforthose who are either presentlyteaching or will beteaching Englishtointernationalstudents, eitherintheUnitedStatesoroverseas.Prospective ENLteacherslearn practicalclassroomapplicationsandvariousteaching techniques. This course provides participants with guidelinesfor planninglessonsinvolvingspecific,techniques,activitiesforenhancing textbookexercises,andeffectivemethodsforcorrectingstudenterrors.
TESL 328 Foundations of Dual Language Instruction History (2) his course providesabroadfoundationalbasisforunderstandingthe historyandlegalbasisofbilingualeducation, duallanguageprograms, andESOL programs intheUnitedStatesandininternational contexts. Ethical,legal,historical,andlinguisticaspectsofsecondlanguageeducation are explored.
TESL 417 Internship in English as a New Language (3) Opportunities to integrate basic skills and knowledge in selected applied practice situations.Includes afieldexperiencewithobservations,assessments, lessonpresentationand planninginanEnglish-as-a-new-languagesetting. Prerequisites: TESL-200 or permission of instructor.

TESL 433 Supervised Teaching and Observation ESL (6) Teaching, observation, and participation activities under the supervision of a cooperatingteacherandaUniversitysupervisor.AgradeofCorbetter mustbeearnedinstudentteachingtoberecommendedforateaching license.
TESL 491 International Clinical Experience TESL (3) International internship placement providesopportunitiesto integratebasicskills and knowledge in selected applied practice situations. Includes an arrangedinternationalfieldexperiencewithobservations,assessments based ontheCEFRstandards,lesson presentationand planning in an Englishasasecondlanguagesetting.Studentswillmaintainareflective journal, developanevaluative portfolio ofonestudents' work, useand evaluatemultipleassessmentinstruments,anddemonstrateapplication ofthestateprofessionalandcontentstandards.Perquisites:TESL325, 328 , or permission of instructor.

## Theatre (THTR)

Theatre courses are taught by the faculty of the Department of Theatre.

THTR 110 Introduction to Theatre (3) Acquaints students with the process of creating theatre and enhances their ability to enjoy andappreciateperformances.Requiresobservationsofsomeevening rehearsals and performances in addition to attendance at lectures. Fall, spring.

THTR 111 Fundamentals of Acting (3) Introduces fundamentals of actingthroughscenestudyandrelatedexercisesandexploresthevoice process during two consecutive semesters. Fall, spring.
THTR 112 Fundamentals of Acting (3) Introduces fundamentals of actingthroughscenestudyandrelatedexercisesandexploresthevoice process during two consecutive semesters.
THTR 120 Production Techniques I (3) Introduces concepts and techniques in the areas of scenery construction, theatre space use and organization. Students become familiar with management and organizationbehindthescenes.Specialemphasisonsafetyandhealth backstage. Fall.
THTR 125 Introduction to Makeup and Costumes (3) Introduces essential techniquesformakeup applicationand costume constructionandmaintenance.Coverstoolsand principles ofbasiccorrective makeup and costume construction with practical application. Fall, spring.
THTR 130 Color and Design for Theatre (3) Acquaints students with the basic principles of design which govern all forms of visual expression. Provides students with the means to communicate in visual terms. Fall, spring.

THTR 135 Graphic Communication for the Theatre (3) (with lab) Preparesstudentsfordesigncourses byexaminingmethodsandprocedures for developing effective communication and realization of visualconcepts.Placesequalemphasisonmechanicalhanddrafting, drawing, and sketching. Includes introduction to lighting graphics and model making. Spring.
THTR 160 Survey and Analysis of Dramatic Literature (3) Examines the forms and conventions of dramatic literature to help students improve their play reading and analysis skills. First half focuses on traditional Aristotelian forms ofdrama; second half concentrates on approaches to dramatic literature that deviate from that tradition. Fall.

THTR 171 Acting I: Process Awareness (3) Examines the fundamentalsoftheactingprocessthroughexercisesandscenestudy.Students participate in exercises designed to strengthen such skills as trust, relaxation, imagination, concentration,ensemble, andobservation.

Prerequisite: Theatre majors only. Fall.
THTR 172 Acting II: Process Awareness (3) Explores the vocal and physical demands placed on an actor. Techniques are learned for finding physical neutrality and acquiring a basic knowledge of how thevoiceworks.AddressesAmericanStageStandardanddeveloping apersonal vocaland physical regimen.Prerequisites:Theatremajors only; THTR 171. Spring.
THTR 190 Theatre Practicum (1) Introduces departmental procedures in all areas of theatre operation. Provides students with the knowledge of backstage safety, equipment, and methodology throughformal presentationandhands-onexperiences.Beginsstudent involvement in practical participation in productions. May be repeated for a total of 2 credit hours. Fall, Spring.
THTR 220 Production Techniques II (3) Develops advanced theoretical and practical application of concepts begun in Theatre 120. Studentsinvestigateadvancescenicconstructiontechniquesincarpentry, metalworking, and rigging. Spring (offered alternate odd years).
THTR 221 Production Techniques III (3) Explores lighting and sound from a technical a traditional lighting and sound equipment and beginsto explorehowitisusedintheatrical production. Prerequisite: THTR 120. Spring (offered alternate even years).
THTR 225 Makeup (3) Refines the techniques of makeup introducedinTheatre 125. Provides a detailed study of the techniques for applyingmakeupemphasizingcharacterandperiodresearch.Projects introduce prosthetics and the application offacial hair. Prerequisite: THTR 125. Fall.

THTR 226 Costume Construction (3) Investigates the fundamentals of costume construction introduced in Theatre 125. Topics include pattern drafting, draping, cutting, fitting, and advanced stitching. Practical projects introduce fabricidentification. Prerequisite:THTR 125. Fall, spring.

THTR 245 Dance I (2) Develops the actor's physical movement and dance proficiency in a one-year studio. Fall, spring.
THTR 246 Dance I (2) Develops the actor's physical movement and dance proficiency in a one-year studio. Fall, spring.
THTR 271 Acting III: Character Study (3) Investigates the basics of characterdevelopmentthroughscenestudy, textanalysis, vocal, and physical exercises. Prerequisites: THTR 112 or 172; permission of instructor. Fall.
THTR 272 Acting IV: Character Study (3) Investigates the basics of characterdevelopmentthroughscenestudy, textanalysis, vocal, and physical exercises. Prerequisites: THTR 112 or 172; permission of instructor. Spring.
THTR 290 Theatre Practicum (1) Through practical experiences, involvesstudentsintheareas oftechnicaltheatre,costumeconstruction, and ticket office. May be repeated for a total of 2 credit hours. Prerequisite: THTR 120 or 190. Fall, spring.
THTR 291 Theatre Practicum for Stage Managers (1) Through practicalexperiences, involvesstudentsintheareaofstagemanagement. Prerequisite: THTR 190. Fall, spring.
THTR 331 CADD for Theatre I (3) Develops beginning-level techniques for using computer assisted drafting and design (CADD) for theatre.Emphasis on Vectorworks 2Ddrafting and theatre graphics. Prerequisites: THTR 120, 135. Fall.
THTR 332 CADD for Theatre II (3) Develops advanced level techniques using computer applications for a variety of purposes in the theatre.EmphasisonuseofsoftwaresuchasVectorworks3D,Google Sketchup 3D, and Adobe Creative Suite to enhance skills for portfolios, presentations, and rendering. Prerequisite: THTR 130, 331.

THTR 335 Scene Design (3) Examines the theory and practice of scenic design andmanipulation ofstage space. Specialemphasis on the development of the "design concept" as related to all aspects of theatrical design. Prerequisites: THTR 120, 130, 135; or permission of instructor. Spring.
THTR 336 Lighting Design (3) Examines the theory and practice of lighting design. Emphasis on the role of the lighting designer as a creativememberofacollaborativeteam.Students exploreavarietyof approachestodevelopingasuccessfullightingdesign. Prerequisites: THTR 120, 130, 135; or permission of instructor. Fall.
THTR 337 Costume Design (3) Examines theory and practice of costume design. Emphasis on development of design concepts and visualizationandarticulationofideas.Investigatesvariousapproaches andtechniquesforcreating thecostumedesign. Prerequisites:THTR 125, 130, 135; or permission of instructor. Fall.
THTR 345 Dance II (2) Expands the actor's physical movement and dance proficiency in a one-year studio. Prerequisites: THTR 245, 246; or permission of instructor. Fall, spring.
THTR 346 Dance II (2) Expands the actor's physical movement and dance proficiency in a one-year studio. Prerequisites: THTR 245, 246; or permission of instructor. Fall, spring.
THTR 350 Stage Management (3) Examines current topics and trends in stage management and explores techniques in the field. Seminar-styleclassinvolvesstudentsinindependentresearch projects with written and oral sharing of information. Prerequisites: THTR 120, 220 or 320. Spring (offered alternate odd years).
THTR 361 Theatre History I (3) Examines social, religious, political, andartisticforcesthathavecontributedtothedevelopmentoftheatre in the West from its origin through the present. Culminates with a final project in which students choose a play or topic and research its social, religious, political, and artistic context. Should be taken in sequence. Prerequisites:THTR 110 or 160; junior or senior standing. Fall.
THTR 362 Theatre History II (3) Examines social, religious, political, and artistic forces that have contributed to the development of theatre in the West from its origin through the present. Culminates with a final project in which students choose a play or topic and research its social, religious, political, and artistic context. Should be taken in sequence. Prerequisites: THTR 110 or 160; junior or senior standing. Spring.
THTR 363 Period Styles for the Theatre 1: Architecture and Decor (3) Connects cultural values with visual imagery representative of important historical periods through a survey of architecture, interior design, and decorative arts from the pre-historic to the modern eras. Emphasis on period research and its importance in the artistic process. Prerequisite: THTR 110 or 160 . Spring (offered alternate even years).

THTR 364 Period Styles for the Theatre 2: Costume History (3) Connects cultural values with visual imagery representative of importanthistorical periodsthroughasurveyoffashionandclothing fromtheprehistorictothemoderneras.Emphasison periodresearch and its importance in the artistic process. Prerequisite: THTR 110 or 160. Spring (offered alternate odd years).

THTR 365 Playwriting (3) Proceeds from basic scene and character development to the writing one-act plays. Prerequisite: THTR 110 or 160 .
THTR 371 Acting V: Classical Texts (3) Prepares the student actor toperformscenesfrom classicaldramaticliterature,includingShakespeare, Sophocles, Ibsen, Chekhov, and others. Scenes specifically
selected to develop physical, sensorial, vocal, and emotional skills. Prerequisites: THTR 271 or 272; permission of acting faculty. Fall.

THTR 372 Acting VI: Classical Texts (3) Prepares the student actor toperformscenesfrom classicaldramaticliterature, includingShakespeare, Sophocles, Ibsen, Chekhov, and others. Scenes specifically selected to develop physical, sensorial, vocal, and emotional skills. Prerequisites:THTR 271 or 272; permission of acting faculty. Spring.
THTR 375 Acting in Dialect (3) Presents an in-depth study of performing in dialect. Students gain the necessary knowledge and skill requiredtocreateappropriateandcredibledialectsneededforrolesin thetheatre.Thecourseteachesstudentstodevelopadialectthrough vowelandconsonantchanges, sound placement, andmasteringthe differences in inflection, rhythm, and tempo. Prerequisite: THTR 172 and junior or senior standing. Fall.
THTR 390 Theatre Practicum (1) Continues student involvement begun in Theatre 290 with practical experiences in various aspects of theatre production. May be repeated for a total of 2 credit hours. Prerequisites: THTR 120 or 190. Fall, spring.
THTR 391 Theatre Practicum for Stage Managers (1) Continues studentinvolvementbeguninTheatre 291 with practical experiences in stage management. May be repeated for a total of 2 credit hours. Prerequisite: THTR 291. Fall, spring.
THTR 395 Special Topics (1) (1-3 credits) Permits the study and/ or practice of auxiliary topics not covered in the regular curriculum in a seminar format. Topics might include musical theatre, regional theatre,stagemanagement,oradvancedstagecraft.Mayberepeated for a maximum of six credits. Offered on demand.
THTR 400 Theatre Management (3) Examines the history, theory, and practiceoftheatremanagementandartsadministration.Covers basiccomponents oforganization,operations, and generalmanagementpractices.Prerequisite:Juniororseniorstanding.Spring(offered alternate odd years).
THTR 430 Advanced Design Projects (1) (1-3 credits) Provides design students an opportunity to explore concepts and skills on an advanced level through paper projects. Individualized course of study is theoretical in nature and is developed in conjunction with amember ofthefacultyto satisfy each student's needs. Prerequisite: Permission of design faculty. May be repeated for a maximum of six hours. Fall, spring.
THTR 435 Senior Portfolios and Career Preparation (3) Prepares students to interview for opportunities in the professional theatre, graduate programs, and internships. Acquaints students with the nature of postgraduate training and career options. Prerequisites: Senior standing; permission of design faculty. Fall.
THTR 440 Director and Designer Collaboration Seminar (3) Exploresthecollaborativeexperienceindesign, throughshort-term and long-term projects. Focuses on the interaction of artistic teams and the creative process of conceptualizing a theatrical production. Prerequisite:Successful completion of one or more of the following: THTR 335, THTR 336, THTR 337, THTR 481. Fall.
THTR 450 Arts Leadership (3) Overview of accounting procedures andbudgetingforthetheatre, incombinationwithanintensivestudy of audiencedevelopmentandmarketingtrendsdirectlyrelatedtothe efficientmanagementand promotionofthearts.Prerequisite:Junior or senior standing. Spring (offered alternate even years).
THTR 465 Senior Seminar in Theatre (3) Encourages students to consider their own values and goals as they prepare to embark on a career in theatre. Emphasis on integration of independent research and creative practice through writing and presentations. Capstone
generaleducation requirementfortheatremajors.Tobetakeninthe senior year. Spring.
THTR 471 Acting VII: Audition Techniques (3) Prepares students to audition foropportunities inthe professional theatre, graduate programs, and internships. Acquaints students with the nature of postgraduate training and career options. Prerequisite: THTR 372. Fall.
THTR 472 Acting VIII: Advanced Project (3) Provides students the opportunitytodemonstrateresearch, analytical, artistic, andtechnical skills, culminating in a formal presentation. Prerequisite: THTR 372. Spring.

THTR 481 Directing I (3) Provides the beginning directing student withaninitial experienceindirectorialanalysis andtheexperienceof mountingselectedscenesinaproscenium, arena, andthrustenvironment.FocusesonPrinciples ofdirecting, interpretation, composition, the actor, and realization of a directorial concept. To be taken in the junior year. Fall, spring.
THTR 482 Directing II (3) Provides a limited number of advanced directingstudentswithanopportunitytoexpandtheirdirectingskills with more complex scene choices. Intensive analysis is expected as wellas productionexerciseswhichillustrateastudent'sabilitytodeal withtheconcept-to-realization process.Tobetakeninthesenioryear. Entrance by application. Fall, spring.
THTR 495 Independent Study (1-3 credits) Permits advanced creative and scholarly work in any area of the theatre arts. The specific plan of study for each individual is determined in consultation with thefaculty.Areas ofstudymay includedirecting, design, playwriting, dramaturgy, theatrehistory, and pedagogy.Prerequisite:Permission of instructor. May be repeated for a maximum of six hours. Fall, spring.
THTR 497 Production Problems (1-3 credits) Offers credit for significanttechnical projectsundertaken.Individual studentworkswith faculty supervision in conjunction with a specific production. Such areas as technical direction, stage management, costume construction, property construction, and dialect coaching may be included. Prerequisite: Permission of instructor. May be repeated for a maximum of six hours. Fall, spring.
THTR 499 Internships in Theatre (3-12 credits) Provides advanced students with the opportunity to work or study in a commercial or regionaltheatreorwitha professionaltraining programwhileearning collegecredit.Programdevelopedinconjunctionwithfaculty.Prerequisites:Juniororseniorstanding;completion ofcorerequirements in field of study; minimum GPA of 3.0; permission of department chair. Fall, spring, summer.

## Writing (WRTG)

Writing courses are taught by the faculty of the Department of Creative Writing.

WRTG 204 Copy Editing (3) Introduces the profession of writing and publishing, focusing on craft fundamentals (grammar and mechanics), publishing and copy editing, resources for writers, literary analysis, and submission procedures.
WRTG 205 Introduction to Creative Writing (3) Introduces basic experience andtechniques of description, characterization, poetry, and narration.
WRTG 206 Introduction to Poetry Writing (3) Teaches basic forms and structures of poetry. Concentrates on techniques as well as content. Prerequisite: WRTG 205 or permission of instructor.
WRTG 207 Introduction to Short Story Writing (3) Teaches ele-
ments ofshortstorywriting.Concentrates on plotconstruction with attention to character, dialogue, and setting. Prerequisite: WRTG 205 or permission of instructor.
WRTG 211 Introduction to Creative Nonfiction (3) Teaches ele-mentsofthepersonalessayandmemoir.Concentratesonvoice,structure, language, and forms. Prerequisite: WRTG 205 or permission of instructor.
WRTG 306 Short Story Writing (3) Teaches techniques for creating characters and turning experiences into short stories. Prerequisite: WRTG 207 or permission of instructor.
WRTG 307 Poetry Writing (3) Teaches techniques of great poets. Provides opportunity for students to write poems. Prerequisite: WRTG 206 or permission of instructor.
WRTG 309 Genre Fiction (3) Teaches tropes and techniques of selected genre fiction such as science fiction, fantasy, mystery, and horror.Providesopportunityforstudentstowriteshortgenrefiction.
WRTG 310 Editing and Publishing (1) Introduces students to the publication processes involved in producing a literary journal from start to finish.
WRTG 311 Creative Nonfiction Writing (3) Teaches advanced techniques ofcreativenonfiction. Providesopportunityforstudents to work on rhetorically complex and experimental CNF projects. Prerequisite: WRTG 211 or permission of instructor.
WRTG 330 Special Topics in Writing (3) Topics vary and may includeyoung-adultfiction, writing, advanced copyediting, literary translation, technical writing, form and theory of poetry, form and theory of fiction.
WRTG 390 Screenwriting (3) Teaches the techniques of screenwriting. Allows students to initiate their own screenplays. Prerequisite: WRTG 207 or permission of instructor.
WRTG 480 Senior Seminar in Creative Writing (3) Permits students topursueanextended, independentwriting projectalongsideclose study of an element of craft or genre. To be taken senior year. Spring.
WRTG 490 Writing Workshop (3) Opportunity to write short stories, poems, essays, and plays with weekly discussion and criticism in a small group. May be taken three times. Prerequisite: One course in creative writing at the 300 level or permission of instructor.
WRTG 494 Writing Internship (1-6 credits) Opportunity for on-site experience in various settings for writing experience.
WRTG 495 Creative Writing: Independent Study (1-9 credits) Opportunityforindependentworkonwriting projectswith criticism and assistance. May be taken three times.

## Graduate Programs

The University of Evansville offers the following graduate programs: Master of Public Health (MPH), Master of Science in Athletic Training (MSAT), Master of Science (MS) in Leadership, Master of Science in Public Service Administration, Master of Science in Athletic Training (MSAT), Master of Science in Health Services Administration (MSHSA), Master of Physician Assistant Science (MPAS) and Doctor of Physical Therapy (DPT).

## Admission

Applicantsmusthaveabachelor'sdegreefromaregionallyaccredited institution. Please refer to each graduate program for specific admission requirements. An application foradmission mustbefiled before course registration is approved.

## Special StudentS

Studentsholdingbaccalaureateoradvanceddegreesfromregionally accredited institutions of highereducation whodo not intend to complete a program ofstudybutwhowish totake a graduate course forpersonalorprofessionalenrichmentmustcompleteaspecialstudentapplicationandreceivespecial permissionfromtheappropriate program director. A special student may earn no more than nine hoursofgraduatecoursecredit.Aspecialstudentapplicationmustbe filed before course registration is approved.

International Students
The University of Evansville welcomes international students to itscampus.Internationalgraduatestudentsshouldsubmitaninternationalstudentapplication, officialtranscriptsofhighschooluniversity degrees and diplomas, official English proficiency exams (IELTS or TOEFL), GRE/GMAT exams (where required), and proof of financial support. For English proficiency requirements or other international admission requirements by program, please contact: Office of International Admission, University of Evansville, 1800 Lincoln Avenue, Evansville, Indiana 47722 USA, 812-488-1392, international@ evansville.edu or evansville.edu.

All students whose native language is not English must take the Michigan Test of English Language Proficiency in addition to the University's writing skills test as a part of registration for their first term. Placement in appropriate English language credit courses will bemadeto providestudentswiththeskillsnecessarytodemonstrate English proficiency.

## Academic Regulations

## Graduate Courses

Courses numbered at the 500 and 600 level may be taken for graduate credit.

## Academic Load

A full-time load for a graduate student is nine hours. The normal load should not exceed 12 hours, unless otherwise required by the program.

## Grades

Courses taken more than six years prior to the completion of the degreewill beassessedbytheappropriateprogramdirectortodetermine applicability to the student's degree requirements.

An overall grade point average of 3.0 on all graduate course work
mustbeattainedbeforeagraduatedegreeisawarded.Allgraduatework iscountedandnoneofitmaybeomittedincomputingtheoverallgrade point average. No more than nine hours of C grades are permissible, unless otherwise specified in the degree program. Courses in which a grade of $D$ is earned do not apply to the requirements for the degree (unlessotherwisespecifiedinthedegreeprogram)butdocountinthe calculationoftheoverallgradepointaverage.Agradeofincomplete(I) mustberemovedwithinonecalendaryearaftertheendofthesemester in which thelisassigned. Afteroneyear, allremaining incompletes are changed to $F$.

## Credit from Other Institutions

The University of Evansville evaluates and may accept credit earnedatotherregionallyaccreditededucationalinstitutions.Aminimum grade of $B$ is required for transfer credit. No more than nine semesterhours ofgraduatecreditmaybetransferred.Studentsmust havewrittenapprovalonatransfercreditrequestformsigned bythe program director and the registrar.

## Graduation

Uponthe recommendation ofthefacultyand the approval ofthe Board of Trustees, the University of Evansville confers its academic degrees. Only those candidates who have fulfilled all scholastic requirements for a degree and who have met their financial obligations to the University will be recommended for a degree.

## Degree Application

Acandidateforadegreemustfileanapplicationforthedegreein theOfficeoftheRegistrartwosemesterspriortotheintendeddateof graduation.Itisthestudent's responsibilitytoensurethatallgraduation requirementsaremet.TheUniversityis responsibleforincluding on the list of graduates only those students who have submitted the applicationfordegreeandhavemetallacademicrequirementsandall financial obligations.

## Center for the Advancement of Learning <br> Master of Science in Leadership <br> Program Director: Johnna Denning-Smith

Thetwo-yearonlineprogramwillassistworking professionalsintheiracquisitionoftheskillsets and mindsets necessary to lead in a variety of settings. Through a rich curriculum and set of programexperiences,studentswilllearnwaystoprovideinnovativethinkingandvisionaryleadership totaketheirorganizationstothenextlevel.Graduates oftheprogram willemergewiththeknowledgeandconfidencetothriveintoday'sdynamicenvironmentsandbepreparedfortomorrow's opportunities and challenges.

TheMasterofScienceinLeadershipDegreeisa36-credit-hourprogramthatintegratesacore leadershipcurriculumwithconcentrationareasfocusingonhighereducation, non-profitleadership, innovation, and public health.

Thepublichealthconcentration willeducateandtrainstudentstoapplytheleadershipknowledgeandskillsacquiredinthecoreoftheprogramtothechallengesfacing publichealthandhealth care providers in the local community and society at large.

Thenon-profitconcentration will givestudentsthenecessaryskillstogrowinleadershipand managementpositions.Fromlearningaboutmanagementstyles,newmediaplatforms,fundraising techniques,andinnovationstrategies,studentswillbeuniquelypreparedforthecomplexchallenges andopportunitiesfacing non-profitorganizationsandthecommunities wheretheyarelocated.

Thehighereducationconcentrationwillbuildupontheknowledgeobtainedinthecoreofthe programtotheissuesandtrendsfacingthoseinvariousrolesinhighereducation.Thiswillprepare thoseinadministrativeandleadershiproleswiththefoundationnecessaryforprofessionalgrowth in the educational setting.

The innovation concentration will give individuals valuable information on using creativity, designthinking, problem-solving, andfacilitation ofchangemanagementinahands-onenvironment.Leaderswilllearnhowtoleveragetheinnovativecapacities ofemployeestogenerategrowth, seize opportunities, drive efficiencies, and position their organizations for future growth.

Admission to the Program Requires the Following:

- Must have a Bachelor's degree from an accredited university
- Official transcripts, completed application, and resume.
- Three years of experience or substantial leadership experience.
- Individuals with less than three years of experience will be required to submit GRE or MAT scores.
- Undergraduate cumulative GPA of 3.0 or MAT or GRE scores
- Two letters of reference
- Essay

Innovation Graduate Certificate (9 hours)
Complete the following courses: LDR 560, LDR 561, and LDR 562.
Non-Profit Leadership Graduate Certificate (9 hours)
Complete the following courses: LDR 540, LDR 541, and LDR 542.
Higher Education Leadership Graduate Certificate (9 hours)
Complete the following courses: LDR 550, LDR 552, and LDR 554.

## Masters of Science

## Master of Science in Leadership

2019-2020 | 36 Hours Required

Major Requirements (36 hrs)
Leadership Core
LDR 505: Leadership Theory
LDR 508: Communicating across Organizations
LDR 512: Organizational Behavior
LDR 590: Decision Making
LDR 543: Strategic Planning and Implementation
LDR 528: Financial Decision Making
LDR 525: Design Thinking for Organizational Change
LDR 530: Cultural Competence and Leadership
LDR 599: Capstone

Complete One Concentration:
Higher Education
LDR 552: Policy and Historical Trends in Higher Education
LDR 550: Critical Issues in Higher Education
LDR 554: Legal Aspects of Higher Education
Non-Profit
LDR 540: Non-Profit Fundraising and Practice
LDR 541: Managing Non-Profit Organizations
LDR 542: Change \& Innovation in Non-Profit Organizations
Innovation
LDR 560: Empathy and Prototyping
LDR 561: Leading Creative Problem Solving
LDR 562: Transforming Organizations to an Innovation Culture
Public Health
PH 543: Population-based Health
PH 542: Health Systems and Policy
PH 580: Programs, Problems and Policies in Public Health

The public service administration program is designed for anyone in a field where service to the public is a core value. The Master of Science (MS) degree is useful in various career areas found in private sector companies and nonprofit organizations.

Application Requirements
Applicantsmusthaveabachelor'sdegreefromaregionallyaccreditedinstitutionandatleast three years of work experience. The following documents are required for admission:

- Official transcripts from all educational institutions attended
- Completed application
- Résumé showing a minimum of three to five years of work experience
- GREorMillerAnalogiesTestscoresforstudentswithanoverallundergraduateGPA oflessthan 3.0 or less than three years of work experience
- Two letters of recommendation


## Curriculum and Academic Requirements

Thecurriculumisbasedonfourcoreareasofstudy.Studentsareexpectedtodevelopafoun-dationinleadership,increasetheirunderstandingofmarketfactors,applyappropriatemanagementstrategies,andincreaseprofessionalskillsthroughsuccessfulcompletionofthefourblocks of study: foundation, market factors, management, and professional skills..

Thestudentshouldexpecttodevoteatleast24hourseachweektoout-of-classroompreparation and study.

## Block Semester Plan

Each required course is offeredinafive-weekformat.Threecoursesaretakeneachsemester consecutively for four semesters. All classes meet on Tuesday evenings. Each newly admitted studentwillbe provided withacalendarforsemesterofclassesatthebeginning ofthesemester. The program is 36 credit hours.

## Masters of Science

## PUBLIC SERVICE ADMINISTRATION

2019-2020 | 36 Hours Required
Major Requirements (36 hrs)
PSA 505 Public Service Leadership (3 hrs)
PSA 506 Ethics and Jurisprudence (3 hrs)
PSA 507 Applied Research and Program Evaluation (3 hrs)
PSA 508 Social Justice and Diversity (3 hrs)
PSA 512 Organizational Behavior (3 hrs)
PSA 514 Management Theory (3 hrs)
PSA 516 Information Systems (3 hrs)
PSA 520 Public Service Marketing (3 hrs)
PSA 528 Public Service Finance (3 hrs)
PSA 543 Grant Writing (3 hrs)
PSA 567 Measurement and Statistics (3 hrs)
PSA 590 Decision Making (3 hrs)

Faculty: Huebner, Keisel (Chair), Lockwich, Liang, Matsel, Pitt, Plisky, Schwartzkopf-Phifer, Whetstone
The University ofEvansville offers a professional entry-levelDoctorofPhysicalTherapy (DPT) degree, which is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). The curriculum involves three or four years of prerequisite and undergraduate course workfollowedbythreeyears(ninesemestersincludingsummers) ofprofessionalstudy.Thephysicaltherapyfacultyhasdesignedacurriculumthatreflectscontemporaryprofessionaleducationand clinical practicemodeling professionalexcellence.Astrongliberalartsandsciencesbackground,a diverseundergraduateexperience,andinnovativeprofessionalclassroomandclinicalcoursework definetheDPTprogramatUE.Throughclassroomandclinicalexperiences,studentsacquirethe requisitecriticalthinkingand problemsolvingskillsnecessarytodeliverqualitypatientcarebased on current best evidence. Students interested intheDoctor of Physical Therapy program follow normal University admission procedures.

## Fees and Assistance

In addition to regular University costs, certain additional expenses are incurred by physical therapystudents.Theseincludeuniforms,laboratoryfees,summertuition, andcostsassociated with clinical courses (travel and housing, criminal background checks, CPR certification, etc.). Students should consult with the Office of Student Financial Services for information about financial assistance.Additional scholarships may beavailablethrough health carefacilities and professional organizations.

## Course Work and Clinical Facilities

All of the physical therapy didactic course work is taught at the Stone Family Center for HealthSciences.Throughoutthephysicaltherapyprofessionalcurriculum,studentsareexposed to integrated clinical activities at local off-campus health care facilities. Students admitted to the Doctor of Physical Therapy program begin professional course work in the summer after their third year ( $3+3$ track) or fourth year ( $4+3$ track). Students on the $3+3$ track complete all remainingundergraduatedegreerequirementsduringthefourthyearandgraduatewithabachelor's degree in May of their senior year. The students' fifth and sixth years are devoted to DPT courses. Students on the 4+3 track will enroll in professional DPT course work in years 5, 6, and 7. A bachelor's degree must be completed prior to enrolling in Physical Therapy 661, Clinical I.

Studentscompletefull-timeclinical courses during the summersessions oftheprofessional program. Two clinical courses are completed during the spring semester of the final year. Variousclinical facilities are utilized in the educational preparation of students. The Department of Physical Therapy affiliates with local, regional, and national health care facilities to provide a diverserangeofqualityclinicaleducationexperiences.WhiletheEvansvillecommunityprovides a number of clinical opportunities, including initial observational and more advanced direct patientcareexperiences,studentsshouldanticipatethepersonalandfinancialimpactassociated withtransportationandaccommodationoutsidetheEvansvilleareaforthemajority oftheirfulltime clinical course work. International clinical course placements for final-level DPT students may be available.

Prerequisitecoursesmustbesuccessfullycompleted priortobeginningthe professionalprogram.Allsciencecoursesmustbedesignedforsciencemajors.Otherdesignswillnotbeaccepted.

Prerequisite courses taken by University of Evansville students
Biology 107; Chemistry 118, 240; Exercise and Sport Science 112, 113; Mathematics 105 (or demonstrated proficiency); Physical Therapy 100; Physics 121, 122; Psychology 121

Application Calendar, Application Materials, Admission Criteria
EnrollmentintheUniversity does notnecessarily guaranteeenrollmentintheDPTprogram.
Applicationcalendar,applicationmaterials, andadmissioncriteriaareavailableonthewebat pt.evansville.edu.

Admission criteria are subject to change. The Department of Physical Therapy reserves the right to make final decisions concerning all admission criteria.

## Doctor of Physical Therapy Curriculum

OnceacceptedintotheDPTprogram,studentswillberesponsibleforfollowing programmatic guidelines and progression policies as outlined intheDPTstudenthandbook, which is available at pt.evansville.edu.

## Program Progression

Thephysicaltherapyfacultymakesdecisionsregardingastudent's progressionthroughtheprofessional program.Itistheresponsibility of the student to complete each course successfully and to demonstrate appropriate professional behavior in all situations in order to progressthroughtheprofessional program.Successfulcompletionis definedastheabilitytodemonstratecompetenceincoursecontent. Criteria forsuccessful completion ofeach courseareconveyed tothe student via the course syllabus. Failure to successfully complete a professionalcoursewillresultindelayed progressionordismissalfrom the professional program.

Each course instructor determines the means forachieving competence in the professional course work he or she teaches. These criteria are articulated in the course syllabus that is provided to the student in written or electronic form. Every student is responsible for reviewing thesecriteriaincluding the methods ofevaluation and grading criteria.

Grading Scale and Minimum Passing Grades for
Doctor of Physical Therapy Program
The minimum passing grade for each course in the curriculum is a C .

For the post-baccalaureate semesters 4-9, students may earn no more than 10 semester hours of course work with grades of C+ or lower.If an 11th semester hour with a grade of $C+$ is earned, progressionthroughtheprogram willbedelayedandthestudentwillbeplaced on an individual program of remediation that will allow repetition of up to 2 courses. If an additional grade of $\mathrm{C}+$ (or lower) is earned, the student will be dismissed from the program. All graduate work is countedandnoneofitmaybeomittedincomputingtheoverallgrade point average. All graduate work is counted and none of it may be omitted in computing the overall grade point average.

## Doctor of Physical Therapy

## PHYSICAL THERAPY

2019-2020 | 51 Hours Required
Major Requirements
Year 1
PA 511: Human Physiology (4 hrs)
PT 510: Foundations in PT (2 hrs)
PT 512: Physical Interventions (2 hrs)
PT 514: Foundations of Therapeutic Exercise (2 hrs)
PT 517: Test \& Measurements (2 hrs)
PT 521: Patient Management I Musculoskeletal (8 hrs)
PT 523: Wellness in Physical Therapy (2 hrs)
PT 531: Gross Anatomy (5 hrs)
PT 532: Kinesiology (3 hrs)
PT 533: Human Growth \& Development (3 hrs)
PT 534: Medical Pathology I (2 hrs)
PT 536: Medical Pathology II (2 hrs)
PT 541: Clinical and Professional Issues I: Introduction (2 hrs)
PT 542: Clinical and Professional Issues II: Adult Learner (1 hr)
PT 551: Scientific Inquiry I (2 hrs)
PT 552: Scientific Inquiry II (2 hrs)

Year 2
PT 661: Clinical I (5 hrs)
PT 622: Patient Management II: Cardiovascular \& Pulmonary (3 hrs)
PT 623: Patient Management III: Multiple Systems (4 hrs)
PT 630: Rehabilitation Pharmacology (2 hrs)
PT 631: Neurobiology (3 hrs)
PT 632: Medical Imaging (2 hrs)
PT 641: Clinical and Professional Issues III Ethics (1 hr)
PT 651: Scientific Inquiry III (2 hrs)
PT 626: Patient Management V Neuromuscular (7 hrs)
PT 644: Behavioral Psychology (3 hrs)
PT 642: Clinical and Professional Issues IV: Advocacy \& Cultural Competency (2 hrs)
PT 643: Leadership \& Administration (3 hrs)
PT 652: Scientific Inquiry IV (2 hrs)

## Year 3

PT 761: Clinical II (5 hrs)
PT 724: Patient Management IV Pediatrics (3 hrs)
PT 726: Patient Management VI: Integrated Musculoskeletal (5 hrs)
PT 727: Community Health (2 hrs)
PT 728: Advanced Screening and Diff Diagnosis (3 hrs)
PT 742: Clinical \& Professional Issues V: Transition to Practice (2 hrs)
PT 751: Scientific Inquiry V (2 hrs)
PT 762: Clinical III (5 hrs)
PT 763: Clinical IV (5 hrs)

Program Director: Jeff Tilly
The certified athletic trainer (ATC) is a highly educated and skille dallied health professional. In cooperation with physicians and other allied health personnel, the ATC functions as an integral member of the health care team for the physically active. Traditionally, secondary schools, collegesanduniversities,sportsmedicineclinics,orthopedicsurgeonoffices,industrialsettings, and professional sports teams have employed certified athletic trainers.

The Master of Science in Athletic Training major is designed for those individuals who seek certification as an athletic trainer for the Board of Certification (BOC) and have an undergraduatedegreewiththenecessaryprerequisites.TheCommission onAccreditation of Athletic Training Education (CAATE) is the accrediting body for athletic training education programs. The University of Evansville's MSAT program is competitive, and a set number of students are allowed entry per year.

The master's degree program prepares the athletic training student for challenges that will be encountered as an allied health professional. Clinical experiences include NCAA DI and DII athletics,professionalsports,highschoolathletics,non-athleticpopulations,andgeneralmedical rotations.

## Admission:

Completed bachelor's degree and admission to UE with the following required course equivalents: Human Anatomy and Physiology with Lab (Exercise and Sport Science 112 and 113)

Recommended course equivalents:

- Introduction to Psychology Biomechanics
- Exercise Physiology Nutrition
- Medical Terminology

Other requirements:

- Grade of C or better in required pre-requisite courses (all prerequisites must have been completed within the last 5 years prior to application).
- Scores for the Graduate Record Examination (GRE) if undergraduate cumulative GPA is below 3.0.
- Official transcripts showing completion of undergraduate degree or official transcripts showingabilitytocompleteundergraduatedegreeattheUniversity ofEvansville priortoenrollment in AT 691 (second year of program).*
- Submission of Master of Science in Athletic Training Program Application.
- Interview (phone or in-person).
- Completed Technical Standards Form.
- Physical examination.
- Proof of immunizations required by UE and Hepatitis-B vaccination.
- Current Emergency Response \& CPR for Professional Rescuer Certification. Background Screen.
- Two letters of recommendation.

Recommended:

- Observational experience documented by a Certified Athletic Trainer.


## Masters of Science

## ATHLETIC TRAINING

2019-2020 | 49 Hours Required
Major Requirements
AT 521: Adv Applied Human Anatomy \& Physiology Lab (2 hrs)
AT 551: Psych Interventions Athletic HC (3 hrs)
AT 575: Advanced Nutrition Issues in Athletic Training (3 hrs)
AT 580: Evidence Based Inquiry (3 hrs)
AT 582: Foundational Skills in Athletic Training (3 hrs)
AT 587: Advanced Therapeutic Modalities (3 hrs)
AT 588: Evaluation of Lower Extremity (3 hrs)
AT 589: Evaluation of Upper Extremity (3 hrs)
AT 590: Clinical Education I (1 hr)
AT 591: Graduate Clinical Education I (2 hrs)
AT 592: Graduate Clinical Education II (2 hrs)
AT 650: Administration of Athletic Training (3 hrs)
AT 688: Advanced Rehab of Athletic Injuries (3 hrs)
AT 690: General Medicine and Pharmacology (3 hrs)
AT 691: Graduate Clinical Education III (3 hrs)
AT 692: Graduate Clinical Education IV (3 hrs)
AT 693: Professional Issues in Athletic Training (3 hr)
Complete one course from:
*AT 699: Directed Evidence Based Inquiry (3 hrs)
PH 501: Epidemiology (3 hrs)
PH 515: Health Behavior (3 hrs)
PH 542: Health Systems and Policy (3 hrs)
PH 580: Programs, Problems, \& Policies in Public Health (3 hrs)
*For students with research-intensive projects, AT 699 will be added to the Spring Semester, second year.

Program Director: Bill Stroube
The University of Evansville's Master of Science in Health Services Administration (MSHSA) isdesignedforthosewhowanttoassumemanagementpositionsin publicand privatehealthserviceorganizations.Themultidisciplinaryapproachtotheprogramisenhancedbyadjunctfaculty fromthebusinesscommunityandhealthcareorganizationsinadditiontoUniversityofEvansville full-time faculty.

The student's area of undergraduate study $\backslash$, past work experience, and future career goals providedirectionfortheselection ofelectivecoursesandlearningactivities.Healthagencyfield experience,supervisedbyfacultyandagencypreceptors,mayberequiredorencouragedbased uponlearningneedsandpastexperiences.Ahealthservicesadministrationgraduate-levelstudy abroad experience is offered most summers at Harlaxton College in England or at other sites.

Thehealthservicesadministrationgraduateprogramisdesignedtosuittheschedulesofboth students who hold full-time jobs and wish to further their education on a part-time basis and students interested in full-time study.

## Application Requirement

- Bachelor'sdegreefromaregionallyaccreditedcollegeoruniversity;adegreeinhealth-related profession or business is preferred but other undergraduate degrees will be considered
- Scores for the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT)
- Two references from the applicant's work environment or undergraduate faculty
- A personal interview with the health services administration program director
- Requirements (114 hours)


## Masters of Science

## Master of Science in Health Services Administration

2019-2020 | 39 Hours Required
Major Requirements (39 hrs)
HSA 505: Health Care Systems: Issues and Trends (3 hrs)
HSA 506: Jurisprudence and Ethics in Health Care (3 hrs)
HSA 507: Health Care Research/Design (3 hrs)
HSA 512: Health Service Org. Behavior (3 hrs)
HSA 514: Health Care Mngt Theory \& Human Resources (3 hrs)
HSA 516: Health Care Information Systems (3 hrs)
HSA 520: Health Care Planning and Marketing (3 hrs)
HSA 524: Health Problems in Health Care (3 hrs)
HSA 528: Financial Management of Health Care Organizations (3 hrs)
HSA 529: Health Services Field Experience (3-6 hrs)
HSA 532: Managed Health Care (3 hrs)
HSA 567: Statistics Appraisal/Evaluation (3 hrs)
HSA 590: Decision Making in Health Care (3 hrs)
*Exactcourserequirementsmayvarydependingupontheindividual's background.

# College of Education and Health Sciences <br> Master of Physician Assistant Science <br> Program Director: Michael Roscoe 

Physician Assistants(PA) are nationally certifiedand state-licensed health care professionals who provide direct patient care and work as part of a physician-led team in delivering a broad rangeofdiagnostic,therapeutic, preventive,andhealthmaintenanceservices.Theyworkindiverse medicalandsurgicalspecialtiesincludingfamilyandinternalmedicine,emergencycare,pediatrics, obstetricsandgynecology,generalsurgeryandsub-surgicalspecialties,andmentalandbehavioral health care. PAs work in a wide variety of settings including hospitals, clinics, physicians' offices, and otherhealth care facilities. For more information about the profession, visitwww.aapa.org.

Entry into the PA Program is based on both quantitative and qualitative variables. There are twoadmission pathways intothe PA Program. Students on both pathways mustmeet the same minimum entrance requirements. Students on the B/PA pathway (Pathway 1) must meet additional requirementsthroughout theirundergraduate experienceatUEtomaintaintheirstatus.

Applicationcalendarand prerequisite,applicationandacceptancerequirementsareavailable onthePA program'swebsite:https://www.evansville.edu/majors/physicianassistant/admission. cfm

Admission criteria are subject to change. The PA program reserves the right to make final decisions regarding all admission criteria.

Upon entry into the PA program, students will be responsible for following programmatic guidelines and progression policies as outlined inthePA Student Handbook, which is available on the PA website https://www.evansville.edu/majors/physicianassistant/handbook.cfm

## Masters of Science

## Master of Physician Assistant Science

2019-2020 | 113 Hours Required
Major Requirements
PA 510: Medical Literature and EBM (3 hrs)
PA 511: Human Physiology (4 hrs)
PA 520: Pharmacology (4 hrs)
PA 521: Behavioral Health (3 hrs)
PA 530: Diagnostic Tests (3 hrs)
PA 531: Medical Imaging (3 hrs)
PA 532: 12-lead EKG (1 hr)
PA 540: The PA Profession (2 hrs)
PA 541: Medical Ethics (1 hr)
PA 542: Health Systems and Policy (3 hrs)
PA 544: Cultural Competence and IPE (2 hrs)
PA 545: Introduction to Clinical Practice ( 1 hr )
PA 612: Human Structure (Gross Anatomy) (6 hrs)
PA 622: Clinical Medicine I (6 hrs)
PA 623: Therapeutics I (3 hrs)
PA 624: Clinical Medicine II (6 hrs)
PA 625: Therapeutics II (3 hrs)
PA 632: History and Physical Exam I (3 hrs)
PA 633: History and Physical Exam II (3 hrs)
PA 634: Clinical Skills (5 hr)
PA 645: Inter Comm \& Case-Based Learn (1 hr)
PA 700: Formative Experience (2 hrs)
PA 750: Family Medicine (4 hrs)
PA 751: Internal Medicine (4 hrs)
PA 752: Mental Health (4 hrs)
PA 753: Pediatric Medicine (2 hrs)
PA 755: General Medicine (2 hrs)
PA 760: General Surgery (4 hrs)
PA 761: Emergency Medicine (4 hrs)
PA 762: Orthopedics (4 hrs)
PA 763: Cardiology (2 hrs)
PA 764: Women's Health (2 hrs)
PA 765: Elective Clinical Experience (2 hrs)
PA 766: Specialty Elective Clin Exp I (2 hrs)
PA 767: Specialty Elective Clin Exp II (2 hrs)
PA 770: Core Content I (1 hr)
PA 771: Core Content II (1 hr)
PA 772: Core Content III (1 hr)
PA 773: Interprofessional Educ Exp (2 hrs)
PA 774: Summative Experience (2 hrs)

Program Director: Payal Patel-Dovlatabadi
The University of Evansville's online Master of Public Health in Health Policy is a great opportunity for those who want further study in public health policy. Students may enroll on either a full-timeorpart-timebasis, withafull-timestudenttakingtwoyearstocompletetheprogram.All coursesaretaughtinanonlineformat.Distancelearning provideslocationandday-to-dayflexibility in scheduling "class" for students who have work, family, or other responsibilities.

The program provides a unified approach to policy. It is built on the recognition that issues of health policycannot be divorced from principles of sound management, nor can health care managementorpolicybedevelopedwithoutafundamentalunderstandingofmorbidity,mortality, andepidemiologicmethods. Further, the programrecognizesthatleaderscannotmakesuccessfuldecisionsaboutthedeliveryofhealth carenorsolvethehealth problemsaffecting society overthenextdecadeswithoutextensiveanalyticanddecision-makingskills.Studentsneedtobe abletotranslatesoundscientificevidenceintoeffectivehealth policy.Theprogramemphasizes traininginquantitativemethods,economics,epidemiology, andevaluativemethodsforpolicy andmanagement.Socialandbehavioralsciencesareintegral partsofmanycoursesthroughout the two-year curriculum.

## Application Requirement

- Bachelor's degree from a regionally accredited college or university
- An undergraduate GPA of 3.0 or above
- Three references from the applicant's work environment or undergraduate faculty
- A statement of purpose


## Public Health Graduate Certificate (18 hours)

Complete the following courses: PH 501, PH 509, PH 515, PH 525, PH 543, and PH 580.
Themission ofthePublicHealthgraduatecertificate istogivestudentsabasic, yetrobustunderstanding of all the aspects of public health. The graduate certificate in Public Health consists of the core curriculum for the Master of Public Health (MPH) degree and is intended for those who:

- are interestedinlearning moreabout the field of publichealth without committing toafull graduate degree
- are currently public health professionals and want to be eligible to take the certifying examination in public health
- areinterestedinadegreeinpublichealthbutarenotsurewhatspecificareofexpertisethey might want to pursue

The certificate program is 18 credits and can be applied to the University's online MPH program should a student decide to pursue the degree program. The Public Health certificate program is completedonlinetoallowstudentsmaximumflexibilitywhilemaintainingpersonaland professional commitments.

## Master of

Public Health
2019-2020 | 39 Hours Required
Major Requirements
PH 501: Epidemiology (3 hrs)
PH 509: Environmental Health (3 hrs)
PH 515: Health Behavior (3 hrs)
PH 525: Biostatistics (3 hrs)
PH 530: Health Economics (3 hrs)
PH 535: Public Health Law and Ethics (3 hrs)
PH 540: Strategic Management in Health Programs (3 hrs)
PH 542: Health Systems and Policy (3 hrs)
PH 543: Population-based Health (3 hrs)
PH 547: Survey Research Methods (3 hrs)
PH 580: Programs, Problems, and Policies in Public Health (3 hrs)
PH 590: Integrative Experience (3 hrs)
PH 598: Public Health Internship (3 hrs)

## College of Engineering and Computer Science <br> Master of Engineering <br> Program Director: Dick Blandford

UE's Master of Engineering professional degree program offers three options:

- Master of Engineering - Electrical Engineering
- Master of Engineering - Computer Engineering
- Master of Engineering - Computer Science

This 12-monthprogramallowsundergraduatestudentstoextendtheirstudiesbyanadditional yearandearnbothabachelor'sandMasterofEngineeringdegree.Thecostfortheprogramis\$525 per credit hour, and students must earn 31 credits to graduate.

## Admission Criteria

The University of Evansville accepts applicants into this program who meet the following requirements:
-Haveabachelor'sdegreeinelectricalengineering,computerengineering,orcomputerscience.

- Have a minimum GPA of 3.0.
- Applicants whose native language is not English must achieve a minimum TOEFL score of 70 (IBT) or a minimum IELTS score of 6.0 .
- Applicants from China must pass College English Test (CET) Level 6 (CET6) as an alterna tive English test requirement.
- International students will be admitted into the program provided they meet entrance requirements.


## Highlights

- This is a 12-month program.
- Minimum of 31 credits over 2-3 semesters will be required.
- Designed for those with bachelor's degrees in electrical engineering, computer engineering, or computer science who wish to gain advanced knowledge and experience in their field.
- All course work will be done in a classroom.
- Students take advanced courses in their engineering area option and in related fields.
- All degree options have the same format but differ in course requirements and content.
- Option to go to Harlaxton College (UE's living, learning center in England) to do research with UE professors.
- Working professionals and part-time students will finish their degree at their own pace.


## Advantages of the Master in Engineering Degree

- Undergraduate engineering students can extend their studies by one year and obtain both a bachelor's in engineering and a Master of Engineering degree.
-AMaster ofEngineering degreeenables studentsto begintheircareerat anadvancedlevel.
- Those with a Master of Engineering degree stand out in the job market and work place as most engineers only have a bachelor's degree.
- Salary for engineers with a Master of Engineering degree is typically $\$ 20,000$ higher than for those engineers with just a bachelor's degree.


## Master of Engineering <br> Computer Science

2019-2020 | 31 Hours Required
Major Requirements with Thesis
Two 500-level courses ( 8 hrs ) in the disipline from the following:
EE 511: Linear Systems and DSP (4 hrs)
EE 515: Image Processing (4 hrs)
EE 554: Advanced Microcontrollers (4 hrs)
EE 558: Embedded Systems and Real-Time Programming (4 hrs)
EE 570: Analog and Digital Communications Systems (4 hrs)
EE 571: Wireless Communications Systems (4 hrs)
CS 515: Cryptography (4 hrs)
CS 530: Artificial Intelligence (4 hrs)
CS 540: Databases (4 hrs)
CS 555: Advanced Computer Graphics (4 hrs)
CS 570: Operating Systems (4 hrs)
CS 573: Mobile App Development (4 hrs)
CS 575: Networks (4 hrs)
CS 578: Embedded Systems and Real-Time Programming (4 hrs)
CS 590: Software Engineering (4 hrs)
Two 400 or 500-level courses (6 hrs) from the following:
EE 411:
EE 415: Digital Image Processing (3 hrs)
EE 454: Microcontroller Applications (3 hrs)
EE 458: Embedded System/Real-time Programming (3 hrs)
EE 470: Analog and Digital Communications Theory (3 hrs)
EE 471: Wireless Communication Theory ( 3 hrs )
CS 415: Cryptography (3 hrs)
CS 430: Artificial Intelligence (3 hrs)
CS 440: Databases (3 hrs)
CS 455: Advanced Computer Graphics (3 hrs)
CS 470: Operating Systems (3 hrs)
CS 473: Mobile Application Development (3 hrs)
CS 475: Networks (3 hrs)
CS 478: Embedded Systems and Real-Time Programming (3 hrs)
CS 490:
CS 498 (EE 498): Independent Study in Computer Science (1-3 hrs)
Threecourses (9hours) which may beoutsidethediscipline. Two must be at the 400-level.

Six hours of thesis credit:
Two one hour courses of graduate seminar:

## Master of Engineering <br> Computer Science

2019-2020 | 32 Hours Required
Major Requirements without Thesis
Three 500-level courses ( 12 hrs ) in the disipline from the following:
EE 511: Linear Systems and DSP (4 hrs)
EE 515: Image Processing (4 hrs)
EE 554: Advanced Microcontrollers (4 hrs)
EE 558: Embedded Systems and Real-Time Programming (4 hrs)
EE 570: Analog and Digital Communications Systems (4 hrs)
EE 571: Wireless Communications Systems (4 hrs)
CS 515: Cryptography (4 hrs)
CS 530: Artificial Intelligence (4 hrs)
CS 540: Databases (4 hrs)
CS 555: Advanced Computer Graphics (4 hrs)
CS 570: Operating Systems (4 hrs)
CS 573:
CS 575: Networks (4 hrs)
CS 578: Embedded Systems and Real-Time Programming (4 hrs)
CS 590: Software Engineering (4 hrs)
Two 400 or 500-level courses ( 6 hrs ) from the following:
EE 411:
EE 415: Digital Image Processing (3 hrs)
EE 454: Microcontroller Applications (3 hrs)
EE 458: Embedded System/Real-time Programming (3 hrs)
EE 470: Analog and Digital Communications Theory (3 hrs)
EE 471: Wireless Communication Theory ( 3 hrs )
CS 415: Cryptography (3 hrs)
CS 430: Artificial Intelligence (3 hrs)
CS 440: Databases (3 hrs)
CS 455: Advanced Computer Graphics (3 hrs)
CS 470: Operating Systems (3 hrs)
CS 473: Mobile Application Development (3 hrs)
CS 475: Networks (3 hrs)
CS 478: Embedded Systems and Real-Time Programming (3 hrs)
CS 490:
CS 498 (EE 498): Independent Study in Computer Science (1-3 hrs)
Fourcourses(12hours) which maybeoutsidethediscipline.Twomust be at the 400-level.

Two one hour courses of graduate seminar:

## Master of Engineering

## Electrical Engineering

2019-2020 | 31 Hours Required
Major Requirements with Thesis
Two 500-level courses (8 hours) in the disipline from the following:
EE 510: Analog Signal Processing (4 hrs)
EE 511: Linear Systems and DSP (4 hrs)
EE 515: Image Processing (4 hrs)
EE 521: Photonics I (4 hrs)
EE 530: Energy Conversion Systems (4 hrs)
EE 545: Industrial Electronics and Controls (4 hrs)
EE 554: Advanced Microcontrollers (4 hrs)
EE 558: Embedded Systems and Real-Time Programming (4 hrs)
EE 570: Analog and Digital Communications Systems (4 hrs)
EE 571: Wireless Communications Systems (4 hrs)
Two 400 or 500-level courses (6 hours) from the following:
EE 410: Analog Circuit Synthesis (3 hrs)
EE 411:
EE 415: Digital Image Processing (3 hrs)
EE 421: Photonics I (3 hrs)
EE 422: Photonics II (3 hrs)
EE 430: Energy Conversion Systems (3 hrs)
EE 440: Communication Electronics (3 hrs)
EE 445: Industrial Electronics and Controls (3 hrs)
EE 454: Microcontroller Applications (3 hrs)
EE 456: Small Computer System Design (3 hrs)
EE 458: Embedded System/Real-time Programming (3 hrs)
EE 465: Digital Control Systems (3 hrs)
EE 470: Analog and Digital Communications Theory (3 hrs)
EE 471: Wireless Communication Theory ( 3 hrs )
EE 498 (CS 498): Independent Study in Electrical Engineering (1-3 hrs)

Three courses (9hours) which maybeoutsidethediscipline.Two must be at the 400 -level.

Six hours of thesis credit in the discipline.

Two one hour courses of graduate seminar.

## Master of Engineering

## Electrical Engineering

2019-2020 | 32 Hours Required
Major Requirements without Thesis
Three 500-level courses ( 12 hours) in the disipline from the following:
EE 510: Analog Signal Processing (4 hrs)
EE 511: Linear Systems and DSP (4 hrs)
EE 515: Image Processing (4 hrs)
EE 521: Photonics I (4 hrs)
EE 530: Energy Conversion Systems (4 hrs)
EE 545: Industrial Electronics and Controls (4 hrs)
EE 554: Advanced Microcontrollers (4 hrs)
EE 558: Embedded Systems and Real-Time Programming (4 hrs)
EE 570: Analog and Digital Communications Systems (4 hrs)
EE 571: Wireless Communications Systems (4 hrs)
Two 400 or 500-level courses (6 hours) from the following:
EE 410: Analog Circuit Synthesis (3 hrs)
EE 411:
EE 415: Digital Image Processing (3 hrs)
EE 421: Photonics I (3 hrs)
EE 422: Photonics II (3 hrs)
EE 430: Energy Conversion Systems (3 hrs)
EE 440: Communication Electronics (3 hrs)
EE 445: Industrial Electronics and Controls (3 hrs)
EE 454: Microcontroller Applications (3 hrs)
EE 456: Small Computer System Design (3 hrs)
EE 458: Embedded System/Real-time Programming (3 hrs)
EE 465: Digital Control Systems (3 hrs)
EE 470: Analog and Digital Communications Theory (3 hrs)
EE 471: Wireless Communication Theory ( 3 hrs )
EE 498 (CS 498): Independent Study in Electrical Engineering (1-3 hrs)

Fourcourses(12hours)which maybeoutsidethediscipline.Twomust be at the 400 -level.

Two one hour courses of graduate seminar.

## Master of Engineering

## Computer Engineering

2019-2020 | 31 Hours Required
Major Requirements with Thesis
Two 500-level courses ( 8 hrs ) in the disipline from the following:
EE 511: Linear Systems and DSP (4 hrs)
EE 515: Image Processing (4 hrs)
EE 554: Advanced Microcontrollers (4 hrs)
EE 558: Embedded Systems and Real-Time Programming (4 hrs)
EE 570: Analog and Digital Communications Systems (4 hrs)
EE 571: Wireless Communications Systems (4 hrs)
CS 515: Cryptography (4 hrs)
CS 530: Artificial Intelligence (4 hrs)
CS 540: Databases (4 hrs)
CS 555: Advanced Computer Graphics (4 hrs)
CS 570: Operating Systems (4 hrs)
CS 573:
CS 575: Networks (4 hrs)
CS 578: Embedded Systems and Real-Time Programming (4 hrs)
CS 590: Software Engineering (4 hrs)
Two 400 or 500-level courses ( 6 hrs ) from the following:
EE 411:
EE 415: Digital Image Processing (3 hrs)
EE 454: Microcontroller Applications (3 hrs)
EE 458: Embedded System/Real-time Programming (3 hrs)
EE 470: Analog and Digital Communications Theory ( 3 hrs )
EE 471: Wireless Communication Theory (3 hrs)
CS 415: Cryptography (3 hrs)
CS 430: Artificial Intelligence (3 hrs)
CS 440: Databases (3 hrs)
CS 455: Advanced Computer Graphics (3 hrs)
CS 470: Operating Systems (3 hrs)
CS 473: Mobile Application Development (3 hrs)
CS 475: Networks (3 hrs)
CS 478: Embedded Systems and Real-Time Programming (3 hrs)
CS 490:
CS 498 (EE 498): Independent Study in Computer Science (1-3 hrs)
Threecourses(9hours) which maybeoutsidethediscipline.Two must be at the 400-level.

Six hours of thesis credit:
Two one hour courses of graduate seminar:

## Master of Engineering <br> Computer Engineering

2019-2020 | 32 Hours Required
Major Requirements without Thesis
Three 500-level courses ( 12 hrs ) in the disipline from the following:
EE 511: Linear Systems and DSP (4 hrs)
EE 515: Image Processing (4 hrs)
EE 554: Advanced Microcontrollers (4 hrs)
EE 558: Embedded Systems and Real-Time Programming (4 hrs)
EE 570: Analog and Digital Communications Systems (4 hrs)
EE 571: Wireless Communications Systems (4 hrs)
CS 515: Cryptography (4 hrs)
CS 530: Artificial Intelligence (4 hrs)
CS 540: Databases (4 hrs)
CS 555: Advanced Computer Graphics (4 hrs)
CS 570: Operating Systems (4 hrs)
CS 573:
CS 575: Networks (4 hrs)
CS 578: Embedded Systems and Real-Time Programming (4 hrs)
CS 590: Software Engineering (4 hrs)
Two 400 or 500-level courses ( 6 hrs ) from the following:
EE 411:
EE 415: Digital Image Processing (3 hrs)
EE 454: Microcontroller Applications (3 hrs)
EE 458: Embedded System/Real-time Programming (3 hrs)
EE 470: Analog and Digital Communications Theory (3 hrs)
EE 471: Wireless Communication Theory ( 3 hrs )
CS 415: Cryptography (3 hrs)
CS 430: Artificial Intelligence (3 hrs)
CS 440: Databases (3 hrs)
CS 455: Advanced Computer Graphics (3 hrs)
CS 470: Operating Systems (3 hrs)
CS 473: Mobile Application Development (3 hrs)
CS 475: Networks (3 hrs)
CS 478: Embedded Systems and Real-Time Programming (3 hrs)
CS 490:
CS 498 (EE 498): Independent Study in Computer Science (1-3 hrs)
Fourcourses(12hours) which maybeoutsidethediscipline.Two must be at the 400 -level.

Two one hour courses of graduate seminar:

## Graduate Course Descriptions

## Athletic Training (AT)

AT 521 Advanced Applied Human Anatomy (2) This course is designedforgraduatestudentswhoneedtostudyhumananatomyin a more detailed format. Emphasis is placed on the gross anatomy of thehumanskeleton, muscular, nervousandcirculatorysystemsusing previouslydissectedcadavers.Studentswillexplore,ingreaterdetail, specific areas related to orthopedic clinical evaluation (ankle, knee, hip, wrist, elbow, shoulder). Additionally, students will complete a teaching componentbasedoninstructorassignmentofabodyarea.
AT 551 Psych Interventions Athletic Health Care (3) This course will provideanoverviewoftherapidlydevelopingfield ofsportpsychology. A wide range of topics in sport and exercise psychology will be reviewed,includinganxiety\&performance,overtraining\&staleness, psychometriccharacteristicsofsportparticipants,andotherpsychologicalfactorsthatmayaffectsportperformance.Althoughthemajor interestofAmericansportpsychologyinvolvesapplicationsintended to enhanceathletic performance, this course will also covertopics of exercise and mental health as well.

AT 575 Adv Nutritional Issues Athletic Training (3) In this course, students will gainknowledgeaboutnutritional needs of athletesand nutrition-related issues which may arise in working with athletes. This study of the science of sport nutrition includes normal nutritional needs; needs for weight gain, loss, and maintenance; effect of diet on performance, training, and recovery; disordered eating, energy requirements and exercise metabolism
AT 580 Evidence-Based Inquiry (3) Theory and practice of evi-dence-basedsportsmedicineforbothclinicalandresearchenvironments, with emphasis on understanding the results of health care interventions and practices for patients and research subjects. This course will introduce the student to clinical epidemiology and the evaluation of the efficacy of prevention, diagnostic, and treatment strategies for acute and chronic conditions. Intended for graduate athletic training majors.
AT 582 Foundational Skills in Athletic Training (3) This course addresses a variety of topics in order to develop the student's competence as an athletic trainer. Emphasis is placed upon skills such as construction and application of protective devices, taping and ban-dagingtechniques,on-fieldassessmenttechniques,andemergency care. This course is designed to satisfy CAATE competences related to the above mentioned content areas and is intended for graduate athletic training majors.
AT 587 Advanced Therapeutic Modalities (3) This course addresses the principles, indications, contra-indications, physiologicaleffects, safety procedures and application of therapeutic modalities for the treatment of athletic injuries, with particular emphasis on evi-dence-based practice and integration with modality selection. This courseisdesignedtosatisfyCAATEcompetences relatedtotheabove mentionedcontentareasandisintendedforgraduateathletictraining majors.
AT 588 Evaluation of Lower Extremity (3) This course addresses the principles,techniques, andtheoriesbehindathleticinjuriesandtheir assessmentfromthewaistdown.Thestudentwillbeabletoassessan injury and determine which special tests to use in order to come to aconclusion about what has occurred to the athlete and what needs to be done in a timely manner. Also, a thorough knowledge of bony landmarks, dermatomes, andmyotomes is coveredwhich willaidthe athletictrainingstudentininjuryassessment.Thiscourseisdesigned to satisfy CAATE competences related to the above mentioned content areas and is intended for graduate athletic training majors.

AT 589 Evaluation of Upper Extremity (3) This course addresses the principles, techniques, and theories behind athletic injuries and their assessment from the head to waist. It also presents a thorough coverageofbonylandmarks,dermatomes, andmyotomeswillaidthe student in injury assessment. Students will learn to assess an injury anddeterminewhichspecialteststouseinordertocometoaconclusionaboutwhathasoccurredtotheathlete.Thiscourse is designedto satisfyCAATEcompetences relatedtotheabovementionedcontent areas and is intended for graduate athletic training majors.
AT 590 Clinical Education I (1) This course is one of a series of five clinicaleducationcoursesintheGraduateProfessional AthleticTraining Program designedtoprovideproficiencyinstructionandclinical experience in the field of Athletic Training. The emphases in this course are clinical anatomy, goniometry, patient initial assessment, and modalities. This includes palpation of various bony landmarks and soft tissue structures, goniometric skill development, various taping techniques, patient assessment skills such as blood pressure, pulserate, anddocumenting relevant medical history, andmodality usage. Clinical application and understanding are emphasized. The fieldexperiencerotationswillbeassigned pertheclinicalinstruction plan. Prerequisite: Admission to the MSAT program.
AT 591 Graduate Clinical Education I (2) This course is one of a series of four clinical education courses designed to provide proficiency instruction and clinical experience in the field of Athletic Training. The emphasis in this course is basic taping and bandaging techniques,emergencyproceduresandonfieldassessment.Thefield experience portion will include local high school football coverage and other field experience as assigned. The athletic training student will work toward completion of the proficiency check-offsheet. This class will meet formally at the discretion of the instructor outside of theclinical settingtoensureadequateprogressisbeingmadetoward completion oftherespectiveclinical proficiencies.Totalclinicalhours will be a result of 2 clinical rotations with an area high school to provideanadequateequipmentintensiverotationaswellasageneral medical rotation at Deaconess Family Medicine Residency. Hour totals for AT 591 will be dependent upon successful completion of proficiencies designated for this class with a minimum of 90 clinical hours.This course is designed to satisfyCAATEcompetences related to the above mentioned content areas and is intended for graduate athletic training majors.
AT 592 Graduate Clinical Education II (2) This course is one of a seriesoffourclinicaleducationcoursesdesignedtoprovideproficiency instruction and clinical experience in the field of Athletic Training. The emphasis in the course is the clinical application of therapeutic modalities. The field experience will include sport rotations with emphasis on the application of modalities. The student will work towardscompletion ofa proficiencycheck-offsheet.Classmeetsfor 1 hour per week outside the clinical setting. Total clinical hours will be a result of 3 clinical rotations with the University of Evansville's athletic department. Hour totals for AT 592 will be dependent upon successfulcompletion ofproficienciesdesignatedforthisclasswitha minimum of 90 clinical hours total. This course is designed to satisfy CAATE competences related to the above mentioned content areas and is intended for graduate athletic training majors.
AT 650 Administration of Athletic Training (3) This course is designed to familiarize students with the administration and management responsibilities of athletic training. Topics of study include managementofathletictrainingfacilities, personnel,students,facility design, purchasing of supplies and equipment, and budgeting. This courseisdesignedtosatisfyCAATEcompetences relatedtotheabove mentionedcontentareasandisintendedforgraduateathletictraining
majors.
AT 688 Advanced Rehab Athletic Injuries (3) This course is designed topreparethestudentathletictrainertoplan,implement,document and evaluate the efficacy of therapeutic exercise programs for the rehabilitationandreconditioningoftheinjuriesandillnessofathletes and others involved in physical activity. It will include mobilization andtapingtechniques commonlyused tofacilitatetherehabilitation process. This course is designed to satisfy CAATE competences relatedtotheabovementionedcontentareasandisintendedforgraduate athletic training majors.
AT 690 Gen Medical \& Pharmacology Athl HIth Care (3) Offers insight on current trends in pharmacology use in an athletic training environment.Also offers currentevaluation of generalmedical conditions, treatment, andreferralbaseforconditionsfoundinathletics. This course is designed to satisfy CAATE competences related to the abovementionedcontentareasandisintendedforgraduateathletic training majors.

AT 691 Graduate Clinical Educ III (3) This course is one of a series of fourclinicaleducationcoursesdesignedtoprovideclinicalexperience in the field of Athletic Training. Each course has a specific area of emphasistoensureadiverseexperienceand provideanopportunity to become proficient in required skills within Athletic Training. The emphasis in this course is rehabilitation. The field experience will be assigned per the clinical instruction plan. The student will work toward completion of the proficiency check-off sheet. This class will meet formally at the discretion of the instructor at least one hour perweek,outsideoftheclinical setting,toensureadequateprogress toward completion oftherespectiveclinical proficiencies.Total clinical hours will be a result of 1 clinical rotation with the University of Evansville's athletic department and with ProRehab PC. Hour totals for AT 691 will be dependent upon successful completion of proficiencies designated for this class with a minimum of 90 clinical hours total. This course is designed to satisfy CAATE competences related to the above mentioned content areas and is intended for graduate athletic training majors.
AT 692 Graduate Clinical Education IV (3) This course is one of a series of four clinical education courses designed to provide clinical experience in the field of Athletic Training. Each course has a specific area of emphasis to ensure a diverse experience and providean opportunity to become proficient in required skills within Athletic Training. The emphasis in this course is the evaluation of athletic injuries and illness. Clinical time will be spent with various athletic trainers working in various athletic training settings. This class will meet formally at the discretion of the instructor outside of the clinicalsettingtoensureadequateprogressisbeingmadebythestudent towardcompletionoftherespectiveclinical proficiencies.Fieldexperienceassignmentwillbemadeandstudentperformanceassessedby the clinical instructor. Total clinical hours will be a result of clinical rotations with the various athletic training settings. Hour totals for AT692willbedependentuponsuccessfulcompletion ofproficiencies designated for this class with a minimum of 135 clinical hours total. This course is designed to satisfy CAATE competences related to the abovementionedcontentareasandisintendedforgraduateathletic training majors.
AT 693 Professional Issues in Athletic Training (3) As a capstone class to the program, this course will be place anemphasis on preparation for the BOC exam and professional development issues related to athletictraining.Thesetopicsincludeincorporating evidence-based medicineintoclinical practice,patient-orientedoutcomesinathletic health care, creating a professional presence in athletic training (resumedevelopment, networking, andjob search tactics), and professionalism/professional ethics.

AT 699 Directed Evidence-Based Inquiry (3) Students will develop a critically appraised clinical topic and evaluate evidence related to its clinical efficacy.Afacultymentor willbeassignedtothestudentwho will act an in a supervisory role during the research project.

## Computer Science (CS)

CS 515 Cryptography (4) Introduces conventional and public-key cryptography,cryptosystemssuch as DES andRSA, andapplications of cryptography to network and system security. This class requires thatstudentscompleteand presenttheresultsofasemesterlongproject chosen as a topic of interest in consultation with the instructor. Prerequisites: CS 215 and MATH 370.
CS 530 Artificial Intelligence (4) Basic ideas and techniques underlyingthedesignofintelligentcomputersystems. Topicsincludeheuristicsearch,problemsolving,gameplaying,knowledgerepresentation, logical inference, and planning. Advanced topics such as robotics, expertsystems,learning, andlanguageunderstandingastimeallows. Thisclass requiresthatstudents completeand presenttheresultsofa semesterlong projectchosenasatopicofinterestinconsultation with the instructor. Prerequisite: CS 215. Recommended: CS 315, 380.
CS540 Databases (4) Presents database concepts and architectures. Topics include basic file structures, data dictionaries, data models, languages fordata definition and queries, andtransaction managementfordatasecurity, concurrencycontrol, andreliability.Hands-on experiencewith databaseandquerysystems. Thisclass requiresthat studentscompleteand presenttheresultsofasemesterlong project chosen as a topic of interest in consultation with the instructor. Prerequisites: CS 215 and MATH 222.
CS 555 Advanced Computer Graphics (4) Advanced course in computergraphics.Topicsincluderastergraphics,texturemapping, curve approximation, and ray tracing. This class requires that students completeandpresenttheresultsofasemesterlong projectchosenasa topic of interest in consultation with the instructor. Prerequisites:CS 355 and MATH 323.
CS 570 Operating Systems (4) Components of operating systems. Taskingand processing, processcoordinationandscheduling,memory organization and management, device management, security, networks, distributed and real-time systems. This class requires that studentscompleteand presenttheresultsofasemesterlong project chosen as a topic of interest in consultation with the instructor. Prerequisite: CS 215. Recommended corequisite: CS 320. Spring.
CS 575 Networks (4) Digital data communication systems in hardwareandsoftware,synchronousandasynchronouscommunication, standards, protocols, networkconfigurations, networkapplications .Thisclass requiresthatstudents completeandpresenttheresults ofa semesterlongprojectchosenasatopicofinterestinconsultationwith the instructor. Prerequisites: CS 215 and MATH 222.
CS 578 Embedded Systems and Real-Time Programming (4) Covers real-time programming techniques that are commonly used on embedded systems. Topics include real-time operating system concepts, concurrentprogrammingandtaskscheduling algorithms, mutual exclusion and synchronization methods, and interprocess communication. Real-world experience writing applications for two popular embedded operating systems. This class requires that studentscompleteand presenttheresultsofasemesterlong project chosen as a topic of interest in consultation with the instructor. Prerequisites: CS 215, EE 354 or CS 220; or permission of instructor. Spring. Note: This course is cross-listed as EE 558.
CS590SoftwareEngineering(4)Study ofsoftwaredesignand devel-opmentprocessinthecontextofalargegroup-programmingproject. Topicscoveredinclude:projectmanagement,softwaremanagement,
requirementsandspecificationsmethods,softwaredesignandimplementation, verificationandvalidation,aspectsofsoftwaretesting and documentationstandards,technicaldocuments,contracts,risks,and liabilities. This class requires thatstudents completeand present the results of a semester long project chosen as a topic of interest in consultation with the instructor. Prerequisite: CS 215. Recommended: CS 290. Fall.
CS 594 Graduate Seminar (1) Students will complete two presentationsonacontemporarytopicrelatedtotheirresearch.Presentations will be made to a group of peers, faculty, and/or undergraduate students.Prerequisites:StudentmustbeenrolledintheMasterProgram in Electrical or Computer Engineering or in Computer Science.

CS 599 Thesis in Computer Science (3-8) Thesis research project. Prerequisites: Student must be enrolled in the Master Program in Electrical or Computer Engineering or in Computer Science.

## Electrical Engineering (EE)

EE 510 Analog Signal Processing (4) Lecture/project covers analysis and design of active circuits. Major topics include feedback, instrumentation amplifiers, active filter design, non-linear circuits, signal generators, and voltage regulation circuits. This class requires that studentscompleteand presenttheresults of asemesterlong project chosen as a topic of interest in consultation with the instructor. Prerequisites: EE 310 and 343.
EE 515 Image Processing (4) A study of the computer methods used inprocessingdigitalimages.Topicsinclude:imageacquisition,image enhancementandrestoration,imagerepresentation,computerimage fileformats,andimagecompression. Processingofbothmonochrome and color images is discussed. Representation and processing of images in the spatial (pixel), frequency and wavelet domains is covered.Thisclassrequiresthatstudentscompleteandpresenttheresults ofasemesterlong projectchosenasatopicofinterestinconsultation with the instructor. Prerequisite: EE 310. Spring.
EE 521 Photonics I (4) Topics include geometrical and physical optics, ray matrices, optical fiber characteristics, losses, dispersion, transverseelectromagneticmodes, andcommunications.Examples of current applications and laboratory demonstrations provided. Thisclass requiresthatstudentscompleteand presenttheresultsofa semesterlong projectchosenasatopicofinterestinconsultationwith the instructor. Prerequisite: EE 215. Corequisite: EE 320. Spring.

EE 525 Lines, Waves, and Antennas (4) Examines transmission lines, waveguides, and antennas. Topics include transmission line equations,Smithcharts,slottedlines, microwaveimpedancematching,planewavepropagation,radiation patterns,andantennaarrays. Thisclass requiresthatstudents completeand presenttheresults ofa semesterlongprojectchosenasatopicofinterestinconsultationwith the instructor. Prerequisite: EE 320. Taught by request.

EE 530 Energy Conversion Systems (4) Introduces theory of operation and analysis of energy conversion devices and systems. Topics include magnetic and electric forces, electromechanical energy conversion, motors,energystorage,solarelectric, wind power,small hydro, fuel cells, biomass, and geothermal. Includes a project lab. Thisclass requiresthatstudentscompleteand presenttheresultsofa semesterlongprojectchosenasatopicofinterestinconsultation with the instructor. Prerequisite: EE 210 and MATH 222.
EE 545 Industrial Electronics and Controls (4) Introduces power electronic systems and design of power electronic devices used for commercial and industrial instrumentation and control. Topics includemagneticmaterialsanddesign,semiconductorwitches, power diodes, rectifiers, inverters, ac voltage controllers, level triggered switching devices, power MOSFETS, IGBT, pulsed triggered devices,
thyristors, GTO, MCT, thyristor circuits, power transistors, dc to dc converters, switch-mode power supplies, dc to controlled ac, UPS, ac to controlled ac, ac and dc motor drivers. This class requires that studentscompleteand presenttheresults ofasemesterlong project chosen as a topic of interest in consultation with the instructor. Prerequisite: EE 342.

EE 554 Advanced Microcontrollers (4) Focuses on the use of micro-controllersinreal-timeapplications.Organizedaroundseveralopenendedprojects.Each projectrequiresthecompletedesignofaworking microcontroller system for a given application and programming in C. This class requires that students complete and present the results ofasemesterlong projectchosenasatopicofinterestinconsultation with the instructor. Prerequisite: EE 354.
EE 558 Embedded Systems and Real-Time Programming (4) Covers real-time programming techniques that are commonly used on embedded systems. Topics include real-time operating system concepts, concurrentprogrammingandtaskschedulingalgorithms, mutual exclusion and synchronization methods, and interprocess communication. Real-world experience writing applications for two popular embedded operating systems. This class requires that studentscompleteand presenttheresultsofasemesterlong project chosen as a topic of interest in consultation with the instructor. Prerequisite: CS 215, CS 220 or EE 354; or permission of instructor. Spring. Note: This course is cross-listed as CS 478.

EE 570 Analog and Digital Communications Systems (4) Communication theory for both digital and analog systems. Emphasis on digital systems. Topics include Fourier analysis, modulation and demodulationtheory,digitalsignalingformats,communicationsystemsdesignfundamentals, andapplications.Probabilityandrandom processes introduced and applied to the study ofnarrow band noise incommunicationsystems.Thisclassrequiresthatstudentscomplete and presentthe results of asemesterlong projectchosenasatopic of interest in consultation with the instructor. Prerequisite: EE 310. Fall.
EE 571 Wireless Communications Systems (4) Provides a mathematicaltreatmentofrandomprocessesastheyapplytoelectricalsystems. Topicsincludeprobabilityandrandomvariables,functionsofrandom variables, conditional statistics, correlationfunctions, powerdensity spectrum, Gaussian white noise, andrandom signal processing. This class requires that students complete and present the results of a semesterlongprojectchosenasatopicofinterestinconsultation with the instructor. Prerequisite: EE 310, MATH 324, MATH 365 or EE 390; or permission of instructor. Spring.
EE 594 Graduate Seminar (1) Students will complete two presentationsonacontemporarytopicrelatedtotheirresearch.Presentations will be made to a group of peers, faculty, and/or undergraduate students.Prerequisites:StudentmustbeenrolledintheMasterProgram in Electrical or Computer Engineering or in Computer Science.
EE 599 Thesis in Electrical Engineering (3-8) Thesis research project. Prerequisites: Student must be enrolled in the Master Program in Electrical or Computer Engineering or in Computer Science.

## Health Services Administration (HSA)

Enrollment is limited to students admitted to the health services administration master's degree program.
HSA 505 Health Care Systems: Issues and Trends (3) Overview of the health care system. Reviews the history and current status of various segments of health care. Includes analysis of the impact of socioeconomic and political factors, as well as current health care issues and trends.
HSA 506 Jurisprudence and Ethics in Health Care (3) Emphasizes legal and ethical processes and their application to the health care
organization,administrator,staff,employees,and patients.Includes ethicaldimensionsofthedecision-makingprocessandcurrentethical issues in health care.

HSA 507 Health Care Research and Design (3) Examines research principlesandmethodsastheycontributetohealthcareorganizations andthedeliverysystem. Providesexperienceindevelopingaresearch proposal and formal critique of research literature.
HSA 512 Health Service Organizational Behavior (3) Uses various organizational, managerial, and behavioral theories, concepts, and principles to analyze, diagnose, predict, and guide human behavior within health care organizations. Emphasis on motivation, leadership, change,communication, personality,groupdynamics, decision making, andorganizationaldevelopment.Stressestheimportanceof understanding professional roles within health care organizations.

HSA 514 Health Care Management Theory and Human Resources (3)Includesthestudy ofmanagementtheoryand practiceasapplied bymanagersofhealthservices.Emphasizesanalysisofthemanager's role, interactionswithpeople,theorganization, andtheenvironment. Special emphasis on human resource issues.
HSA 516 Health Care Information Systems (3) Provides an understandingoftheconceptsandapplicationsofinformationsystemsused in the management of health care systems.
HSA 520 Health Care Planning and Marketing (3) Integrates longrange goal planning with dimensions of marketing for health care services.Concepts,techniques, andtheoriesusedintheplanningand management of marketing in the health care industry.
HSA 524 Health Problems in Health Care (3) A study of health promotion,specificdiseases, andhealth problemsthroughoutthelife cycle. Includes communicable and chronic diseases and conditions that affect the individual, the family, and the community. Explores role of health care system in dealing with these problems through prevention and treatment.
HSA 528 Financial Management of Health Care Organizations (3) Focuses on the acquisition, allocation, and management control of financial resources within health care organizations. Includes cost analysis, financial position analysis and strategies, reimbursement, pricing policies, budgeting, capitalexpenditure, analysis offinancial reports, and informal and external controls.
HSA 529 Health Services Field Experience (1) Provides field experiencewithinaselectedhealthcareorganizationwiththesupervision of anagencypreceptorandfacultymember.Designofcoursedependent upon the individual student's past and present work experiences in health careorganizations aswellasfuturegoals.Prerequisite:Permission of the instructor.
HSA 532 Managed Health Care (3) Examines the changing role of managed careorganizationsinthehealth caresystem. Discussesthe history, basicstructureofmanaged carefirms, the interrelationships among providers, andtheirevolvingrole.Theirimpactonhealthcare economics discussed in detail.
HSA 567 Statistics for Appraisal and Evaluation (3) Focuses on the analysisofdatacommontohealthcare.Includesdatadescription,elementsofprobability,distribution ofrandomvariables,estimationand confidenceintervals,binomialandnormaldistributions, hypothesis testing, contingency tables, regression analysis, and ANOVA.
HSA 590 Decision Making in Health Care (3) Examines decision making in health services administration by extensive use of case studies.Material from otherHSA courses integrated intothe study of decisions facing all types of health care organizations.
HSA 595 Independent Study (1) Independent research in health care managementconductedunderfacultysupervision. Prerequisite:Per-
mission of the instructor.
HSA 598 Internship in Health Care Management (1) Structured assignment which allows student to gain practical experience in a health caremanagement position relatedtoanarea ofcareerinterest. Student is directed by the internship director and supervised by a memberofthecooperatingorganization. Prerequisite:Permission of the health services administration program director.
HSA 599 Special Topics in Health Services Administration (1) Lecturesanddiscussion oftopics notcoveredinregularcourseofferings. Providesgreaterdepthtotopicsofspecialinterestorexploresrapidly changing areas in health services administration.

## Leadership (LDR)

LDR 505 Leadership Theory (3) This course examines leadership theory, concepts, and practice.Studentswillidentifyleadersandlead-ershipstylesandapplytheknowledgetobetterunderstandandpositivelyaffecttheirorganization,business,orinstitution. Self-reflection will beafocus ofthe class as students evaluate theirleadershipstyles and practicestoidentifyareas ofgrowthand personal development.
LDR 506 Ethics and Jurisprudence (3) Emphasizes ethical processes andtheirapplicationtoleadership.Includedareethicaldimensions of thedecision-makingprocessandcurrentethicalissues.Examinesthe relationship between legal and ethical issues.
LDR 508 Communication Across Organizations (3) This course will examineandanalyzecommunicationtheoriesin organizations. The student will study the principles of communication effectively used in high-functioning teams. The course will allow students to look at problemsincommunicationandhowitcaneffectively createchange across an organization of any size.
LDR 512 Organizational Behavior (3) Uses various organizational, managerial, andbehavioraltheories, concepts, and principlesinanalyzing, diagnosing, predicting, and guiding human behavior within organizations committed to public service.Emphasizes motivation, leadership, change, communication, personality, group dynamics, and organization development.
LDR 525 Design Thinking for Organization Change (3) This course will explore the concepts of systems thinking and design thinking and apply them to complex problems facing organizations of all types.Knowledgeandskillsaredevelopedinholisticsystemsanalysis, empathy,problem-definition,ideation,rapid-prototyping,andexperimentation to foster innovation. Students will utilize collaborative, cross-disciplinaryapproachestotacklemulti-faceted problemsand develop innovative solutions.
LDR 528 Financial Decision Making (3) Focuses on the acquisition, allocation, and management control of financial resources within organizations. Includes cost analysis, financial position analysis and strategies, reimbursement, pricing policies, budgeting, capital expenditure, analysis of financial reports, and informal and external controls. Emphasizes financial terminology and organization of financial statements. Requires analytical approach to ratio analysis and organization diagnostics.
LDR 530 Cultural Competence \& Leadership (3) This course examines the competencies needed to thrive as a culturally responsive leader, whilefostering growth within a diverse organization. Course participants will learn to recognize personal and institutional biases associated with discrimination and acquire the knowledge and the skillset needed to lead cross-culturally.
LDR 540 Non-Profit Fundraising \& Practice (3) This course is designedforcurrentoraspirantmanagers,staff,andvolunteersinthe non-profitsectorwhowanttobecomefamiliarwiththefundamentals of fundraising. We will look at philanthropy on a global scale and
within the United States. Key areas that will be covered are funding sources; motivations forgiving; methods of giving;types offunding; and developing relationships.
LDR 541 Managing Non-Profit Organizations (3) This course will help students understand the important role non-profits play in the United States and the impact they have on communities. We will discuss the strengths, weaknesses, opportunities and threats for non-profits and their leaders. Key areas such as a mission statement, strategicplanning,boards, volunteers, andcareersinnon-profitorganizations will be covered.
LDR 542 Change \& Innovation in Non-Profit Organi (3) This course is designed forstudents who are interested in learning about innovation in a world that is steeped in history. While the non-profit worldtends to change slowly, recentinnovations areforcing change quickly. In this course we will discuss the major theories of change; thedifferencesbetweenpersonalchangeandorganizationalchange; the impact of organizational change on leaders; and innovations in the world of non-profits.
LDR 543 Strategic Planning \& Execution (3) This course examines the strategic dimensions ofleadership. Topics includeestablishing a vision,strategicplanning, andimplementation ofstrategicinitiatives. Students will examine strategic issues and apply theirknowledge to positively affect their organization, business, or institution.
LDR 544 Non-Profit \& Social Media (3) Social Media is an ever-changing field and non-profits are embracing the media platforms for various reasons. From tellingyour story through blogging, crowd funding, branding your non-profit, ensuring privacy, and creatingapps;thisclass willmaneuverthevastworld ofsocialmedia. We will use various platforms and speakers to discuss the tools ofthe tradeand hownon-profitorganizations canbestbenefitfromthem.
LDR 550 Critical Issues in Higher Education (3) This course will explore the academic, political, legal, governmental, financial, and otherinfluencersthathighereducationleadersareforcedtoconsider as they lead their institutions into the future. This course will build upon the content from the Policy and Historical Trends in Higher Education course, as well as the core leadership courses.

LDR 551 Student Services Support (3) This course focuses on the theoreticalbasis andbestpractices instudentservicesinhighereducation with particular emphasis on financial aid, retention, recruitment,studentactivities,supportservicesandresidencelife.Students will develop an understanding of the changing demographics and characteristicsofcollegestudentsinrelationtoacademic,social, and physical needs.
LDR 552 Policy \& Historical Trends in Higher Ed (3) This course is designed to help you think about colleges and universities and the historical and social forces that have affected their development (including policy decision) in the United States. Formal education, including post-secondary education, has been integral to the social andeconomicdevelopmentofthe Americanfreeenterprisesystem. The aim of the course is to provide a sound framework for using historical analysis to interpret problems, shape policy, and develop sound decision making.
LDR 554 Legal Aspects of Higher Education (3) This course investigatesthelegislationandlitigationwhichformsthebasis ofeducation atthenational,state, andlocallevels.Studentswillexaminehistorical and current cases rendered by federal and state courts concerning procedural and substantive due process, civil rights, special populations, parent and student rights, and contractual legalities to help professionalshaveasoundknowledgeofthepertinentlegallandscape for leadership and decision making.
LDR 560 Health Systems \& Policy (3) The aim of this course is to
provide students with an overview of the U.S. health care system, its components, and the policy challenges created by its organization. The course will focus on the major health policy institutions and importantissuesthatcutacrossinstitutions, including privateinsurers andthefederal/statefinancing programs. Attention willalsobegiven to disparities in access to care, the role of pharmaceuticals in health care and the pricing and regulation of the pharmaceutical industry, the quality ofacre, the challenges oflong-term care, and theaging of the population, and the drivers of cost growth. Spring.
LDR 561 Leading Creative Problem Solving (3) This course will explorehowleaderscanutilizeappliedcreativityandcreativeproblem solving within organizations. Systemsthinking will beintroduced to helpstudentsunderstandhowtocreatechangewithinanorganization or team. Students will examine creative problem solving styles and thewaystheyinfluencecreativeproblemsolving processes.Students will learn creative problem solving processes and facilitation skills necessarytodefinecomplexproblems,ideate, developsolutions,and create action plans in collaborative settings. Divergent and convergent thinking skills will be applied to enhance creativity and drive innovation.
LDR 562 Transforming Organizations to an Innovation Culture (3) In this course, leaders will learn how to put in place a reliable system throughwhichanentireorganizationcanengageseamlesslyininnovation.Leaders will learnhowtoleveragetheinnovative capacities of employeestogenerategrowth,seizeopportunities,driveefficiencies, and position their organizations well for the future.
LDR 570 Population-Based Health (3) This course presents selected information, concepts, and methods from the field of public health. Topics concerning the history, organization, financing, and services of the public health system are discussed. All topics are presented from a population-based perspective. Summer.
LDR 580 Programs, Problems, \& Policies (3) This course examines the myriad of programs and policies in public health via a developmental approach to learning about health problems. The course will cover a variety of topics, including state programs and policies, maternalandinfanthealth, programplanning, research, monitoring, and advocacy. Spring.
LDR 590 Decision Making (3) Examines decision making in leadership roles by extensive use of case studies. Material from other LDR courses is integrated into the study of decisions facing all types of organizations committed to leading and serving.
LDR 599 Capstone Project (3) This is an experiential learning course in which students complete real-world consulting projects for start-upsorexistingorganizations(business,non-for-profit,civic,oreducational).Allteamsareguided byacoach.Competenciesaredeveloped and refined in leading consulting projects, project management, teamwork, professionalinteraction, andcommunication presentation skills.Studentsdrawupondiverseteammemberstrengthstodeliver value on their projects. The Graduate Capstone course provides the studentwiththeopportunitytoapplytheskillsetsdevelopedthroughout the course of the program. The student will work in cross-disciplinaryteamstodevelop recommendationsforclientsonreal-world issues. This experience will allow the student to enhance his or her critical thinking, leadership, teamwork, and communication skills. The Capstone projects vary infocus and are based upon the specific needs ofclientandtheprofessionaldevelopmentneedsofthestudent. This experience is designed to excite, challenge, and exhilarate the studentwithaviewofhowtoenhancehis orherskillsforprofessional effectiveness.

## Physical Therapy (PT)

Enrollment is limited to students admitted to the Doctor of Physical

Therapy program. All summer semester courses in the second and third years of the professional program are prerequisites for courses offered in the fall semester of that year. Fall courses are prerequisites for spring offerings.
PT 510 Foundations in PT (2) This course introduces the foundational proficiencies necessaryforpracticeintheprofessionofphysical therapy.Topicsincludebodymechanics,elements ofdocumentation (initial encounter, daily note, re-examination, discharge summary), effects of inactivity, foundations of therapeutic exercise, infection control, mobility training, patient/client equipment, patient/client stress, positioningandturning, posturepreparationforpatient/client care, proprioceptive neuromuscular facilitation trunk and extremity patterns, range of motion exercise, stretching exercise, transfer training,vitalsigns,wheelchairs,andwoundmanagement.Principles from the Guide to Physical Therapist Practice are incorporated into the courseandwrittendocumentation, as suggested bytheguide, is utilized for specific lab activities. Students participate in initial field experiences in an acute care, inpatient rehabilitation, and pediatric facility. Prerequisite: PT 541.
PT 510L Foundations in PT Lab (0) Lab that accompanies PT 510, Foundations of Physical Therapy.
PT 512 Physical Interventions (2) This lecture/lab course provides the student with an introduction to the therapeutic modality and otherphysicalinterventionskillscommonlyencounteredinphysical therapy practice.Thecoursecoversthehealing process, painmechanisms,indications/contraindication, and physiologicaleffectsofeach intervention in a lab/lecture experience. The primary interventions coveredincludeelectricalstimulation, hydrotherapy,softtissuemassage, cryotherapy, thermal modalities, electromagnetic modalities, ultrasound, traction, and compression. Prerequisite: PT 541.
PT 512L Physical Interventions Lab (0) Lab that accompanies PT 512, Physical Interventions.
PT514 Foundations of Therapeutic Exercise (2) This course provides thestudentwithanintroductiontocommonlyprescribedtherapeutic exerciseinterventions.Anemphasiswillbe placedonunderstanding therapeuticexercisefrom a motorcontrol perspective andhow pain affects motor control and patterns of movement. Progression of fundamentalexercisesthroughtheneurodevelopmental posturesas theyrelatetocommonimpairmentsfoundintheoutpatient physical therapy setting will be covered. Students will learn the purpose of eachtherapeuticexercisetechniqueanddemonstrateapplicationand critical thinking skills through practical experiences in preparation for future patient management courses. Prerequisite: PT 541.
PT 514L Foundations of Therapeutic Exercise Lab (0) Lab that accompanies PT 514, Foundations of Therapeutic Exercise.
PT 517 Test \& Measurements (2) Introduces the basic procedures for objective assessment of the musculo-skeletal system through measurement of joint range of motion (ROM) and muscle strength. Laboratory sessions will allow practice in the techniques of goniometry and manual muscle testing (MMT). Inclinometers, hand held dynamometers and isokinetic testing are introduced. Prerequisite: PT 541. Spring.
PT 517L Tests \& Measurements Lab (0) Introduces the basic proce-duresforobjectiveassessmentofthemusculo-skeletalsystemthrough measurement of joint range of motion (ROM) and muscle strength. Laboratory sessions will allow practice in the techniques of goniometry and manual muscle testing (MMT). Inclinometers, hand held dynamometers and isokinetic testing are introduced. Prerequisite: PT 541. Spring.
PT 521 Patient Management I Musculoskeletal (8) Initiates patient managementsequence.Expandsupontheanatomical,kinesiological,
and therapeutic exercise principles presented in previous courses. Emphasis on examination and assessment of the musculoskeletal system.Commonconditionsandimpairmentsarepresentedandreinforced through use of case examples. Appropriate interventions are addressedconceptuallyand performedinthelaboratory.Addresses concepts and techniques related to proprioceptive neuromuscular facilitation.Medicaldocumentationintegratedintolaboratoryactivitiesandassignments. Experientialopportunitiesincluded.Prerequisite: PT 541. Spring.
PT521LPatient Management I Lab (0) Initiates patient management sequence. Expands upon the anatomical, kinesiological, and therapeuticexerciseprinciplespresentedinpreviouscourses.Emphasison examinationandassessmentofthemusculoskeletalsystem.Common conditionsandimpairmentsarepresentedandreinforcedthroughuse ofcaseexamples.Appropriateinterventionsareaddressedconceptually and performed in the laboratory. Addresses concepts and techniques relatedto proprioceptiveneuromuscularfacilitation.Medical documentationintegratedintolaboratoryactivitiesandassignments. Experiential opportunities included. Prerequisite: PT 541. Spring.
PT 523 Wellness in Physical Therapy (2) This course address issues related to wellness and overall health and fitness promotion from a physicaltherapyperspective.Areasoflearning willincludeintroductiontocommonfitnessandwellnessprograms,nutrition, balanceand movementscreening, andapplicationoftransitionfromrehabilitation to encouraging behavior change promoting lifelong wellness. This course, when completed in addition to PT 451/551 and PT 452/552, meetsthecriteriaforthegeneraleducationcapstoneoutcomeaswell as one writing-intensive course. Prerequisite: PT 541.
PT 531 Gross Anatomy (5) For students in the physical therapy program.Emphasis on gross anatomy of the human skeleton, muscular, vascular,andnervoussystems.Knowledgeofgrossanatomyprovides students with a sound foundation upon which other courses in the physical therapy curriculum can directly or indirectly be related. Content presented in a regional approach, and includes anatomical concepts such as proper terminology, surface anatomy, and joint function. Gross anatomy is best learned in the laboratory through dissection ofthe human body. Course is primarily alaboratory experience. Prerequisite: PT 541.

PT 531L Gross Anatomy Lab (0) For students in the physical therapy program.Emphasisongrossanatomyofthehumanskeleton,muscular,vascular,andnervoussystems.Knowledgeofgrossanatomy providesstudentswith asoundfoundation uponwhichothercourses in the physical therapy curriculum can directly or indirectly be related. Content presented in a regional approach, and includes anatomical concepts such as proper terminology, surface anatomy, and joint function. Gross anatomy is best learned in the laboratory through dissection of the human body. Course is primarily a laboratory experience. Prerequisite: PT 541.
PT 532 Kinesiology (3) Introduces the elements and principles basic to the study of human movement. It combines the disciplines of biomechanics, physiology, andanatomytoanalyzefunctionalmovements, balance, and gait. Discusses concepts ofkinetics, kinematics, length-tension relationships, and the functional significance of the structure of biological tissues. Emphasizes clinical application of mechanical concepts. Prerequisite: Acceptance into the DPT program. Summer.
PT 532L Kinesiology Lab (0) Introduces elements and principles basic to the study of human movement. Includes principles of basic biomechanicsaswellasbiomechanicalbehaviorofbiologicaltissues. Discusses concepts of kinetics, kinematics, length-tension relationships, and the functional significance of the structure of biological tissues.Emphasizesclinicalapplication ofmechanicalconcepts.Pre-
requisite: Acceptance into the DPT program. Summer.
PT 533 Human Growth \& Development (3) Presents typical human developmentfromconceptiontodeathincludingfunctionalchanges inpostureandmovement.Presents processesofgrowth,maturation, adaptation, motor control, and motor learning. Discusses concepts of critical period, health risk, physiologic reserve, and senescence. The relationship of physical, cognitive, and social theories of human developmentandage-relatedsystemchangesaregiven.Viewsmotor behavior across life span within a social and psychological context. Prerequisite: Acceptance into the DPT program. Summer.
PT534 Medical Pathology I (2) Explores consequences of disruption in normal physiological and developmental processes. Common diseases and disorders involving all major body systems addressed, aswellasselectedsystemicdiseases. Topicsincludediseases ofinfectious,immunesystem,traumatic, degenerative,andcongenitalorigin. Focuses on pathogenesis, clinical presentation, laboratory findings, prognosis,medicalinterventionincludingpharmacologicalagents, and implications related to physical therapy practice. Prerequisite: PT 541. Fall.
PT 536 Medical Pathology II (2) This course explores the consequences of disruption in normal physiological and developmental processes.Commondiseases,disordersandsyndromesinvolvingthe neurologicalbodysystemsareaddressed, aswellasselected systemic diseases. Topics include diseases of an infectious nature, immune systemdeficiencyanddegenerativeorigin.Thecoursefocusesonthe pathogenesis, clinical presentation, laboratoryfindings, prognosis, medical intervention including pharmacologic agents and implications relatedtophysicaltherapypracticeinregardstotheneurological body system. Prerequisite: PT 541. Spring.

PT 541 Clinical \& Professional Issues I: Introduction (2) First in series ofclinicaland professionalissuescourses. Providesintroduction toprofessional practiceexpectationsofphysicaltherapy.Providesorientationandstrategiesforsuccessintheprofessional program.IntroductiontoAmerican PhysicalTherapyAssociation.Studentsexplore the practice of physical therapy utilizing the Guide to Physical Therapist Practice and the core values of the profession. Introduction to professionalethicsandcommunication requiredin professional relationships. Prerequisite: Acceptance into the DPT program. Summer.
PT 542 Clinical \& Professional Issues II: Adult Learning Principles (1) Second in series of four clinical and professional issues courses. Focuses on physical therapist's role as an educator and developing one'sowncultural competence. Provides introductiontofederal programs, including Medicare and Medicaid. Prerequisite: PT 541. Fall.
PT 551 Scientific Inquiry I: Stats \& Research (2) This is the first in a series offivecoursesdesignedtopreparethegraduateto practiceinan evidence-basedmannerandtobeanastuteconsumerandjudgeofscientificresearch.Topics includefundamentals ofclinical rehabilitation researchincludingevidence-basedpractice,searchingtheliterature, and research ethics. Fundamentals of clinical research approaches includevariablerecognition, research validity, measurementtheory, reliability,responsiveness, andvalidity.Basicstatistical proceduresto assessmean differences aswellasinferencetesting are covered.This course, when completed in addition to PT 452/552 and PT 423/523, meetsthecriteriaforthegeneraleducationcapstoneoutcomeaswell as one writing-intensive course. Prerequisites: PT 541. Fall.
PT 552 Scientific Inquiry II: Critical Appraisal (2) This is the second in a series of five courses designed to prepare the graduate to practice in anevidence-basedmannerandtobeanastuteconsumer and judge of scientific research. Topics include critical appraisal of researchrelatedthediagnosticprocessandinterventiontrials.Student completecriticalappraisals of publishedresearchinawrittenformat
and present their appraisals orally. This course, when completed in addition to PhysicalTherapy 451/551 and 423/523, meets the criteria fortheGeneralEducationcapstoneoutcomeaswellasonewriting-intensive course. Prerequisite: PT 541. Spring.
PT 622 Patient Management II: Cardiovascular and Pulmonary (3) Applies principles ofrehabilitationsciencetopatientswithdisorders of the cardiovascular or pulmonary systems. Topics include pathophysiology, patient assessment, medical and surgical management of disease, and safety aspects. The course emphasizes the design, implementation, and administration of a team-based approach to cardiovascularandpulmonaryrehabilitationanddisease prevention. Prerequisite: PT 441 or 541. Spring.
PT 622L Patient Management II: Cardiovascular and Pulmonary Lab (0) Applies principles of rehabilitation science to patients with disordersofthecardiovascularorpulmonarysystems. Topicsinclude pathophysiology, patientassessment,medicalandsurgicalmanagementofdisease,andsafetyaspects.Thecourseemphasizesthedesign, implementation, and administration of a team-based approach to cardiovascularandpulmonaryrehabilitationanddiseaseprevention. Prerequisite: PT 441 or 541 . Fall.
PT 623 Patient Management III: Multiple Systems (4) Studies physicaltherapymanagementofpatientswithamputations,integumentary and oncologic disorders, as well as acute and chronic disorders seen in theolderadult.Student expected to discuss the medical, surgical, andpharmacologicalmanagementoftheseconditions.Emphasison problem solving with material presented in module format. Laboratoryactivitiesincludebalanceassessment, woundassessmentand management,lymphedemainterventionsincludingbandaging, geriatric screening, functional assessments, and exercise for the elderly. Concepts associated with limb amputations and prosthetic devices addressed in laboratory setting. Students participate in an observational experience in a prosthetic clinic, as well as at a health care facility specializing in wound care. Prerequisite: PT 441 or 541. Fall.
PT 623L Patient Management III: Multiple Systems Lab (0) Studies physicaltherapymanagementof patientswithamputations,integumentary and oncologic disorders, as well as acute and chronic disordersseenintheolderadult.Studentexpectedtodiscussthemedical, surgical, and pharmacological management of these conditions. Emphasis on problem solving with material presented in module format. Laboratory activities include balance assessment, wound assessmentandmanagement,lymphedemainterventionsincluding bandaging, geriatricscreening,functionalassessments, andexercise fortheelderly. Conceptsassociated with limbamputationsand prosthetic devices addressed in laboratory setting. Students participate in an observational experience in a prosthetic clinic, as well as at a health care facility specializing in wound care. Prerequisite: PT 441 or 541. Fall.

PT 626 Patient Management V Neuromuscular (7) Studies physical therapy management of the patient with neurologic dysfunction, including stroke, traumatic brain injury, spinal cord injury, and multipleprogressiveneurologicconditions.Pathology, etiology, and natural history ofthese disorders are presented intandem with their medical, surgical, and pharmacological management. Students are expectedtobeabletoexamineandevaluatepatientswithneurological dysfunctionbyselectingappropriatetestsandmeasures, developing efficaciousplansofcare,implementingtherapeuticinterventions,and documentingusingthebestevidence. Studentsarealsoexpectedto provide a rationale for all decisions made as part of this patient management process, including selection of appropriateoutcomemeasures. Experiential opportunities, clinical simulations, role playing, small group learning activities, and video demonstrations are used with problem-solving exercises to reinforce mastery of the material.

Prerequisite: PT 441 or 541. Spring.
PT 626L Patient Management V Lab (0) Studies physical therapy management of the patient with neurologic dysfunction, including stroke, traumatic brain injury, spinal cord injury, and multiple progressive neurologic conditions. Pathology, etiology, and natural history ofthesedisordersarepresentedintandem withtheirmedical, surgical, and pharmacologicalmanagement.Studentsareexpected to be able to examine and evaluate patients with neurological dysfunction by selecting appropriate tests and measures, developing efficaciousplansofcare,implementingtherapeuticinterventions,and documentingusingthebestevidence. Studentsarealsoexpectedto provide a rationale for all decisions madeas part of this patient management process, including selection of appropriate outcomemeasures. Experiential opportunities, clinical simulations, role playing, small group learning activities, and video demonstrations are used with problem-solving exercises to reinforce mastery of the material. Prerequisite: PT 441 or 541. Spring.
PT630RehabilitationPharmacology (2)Presents basic aspects ofthe mechanism of action of drugs commonly employed in the practice ofrehabilitation.Fundamental principles ofdrugactionarefollowed by an in-depth discussion of specific drugs used. Topics include pharmacokinetics,pharmacodynamics, pharmacoeconomics,drug interactions, polypharmacy,andadversedrugreactions.Prerequisite: PT 441 or 541.
PT 631 Neurobiology (3) Lecture-lab. Normal development of the brainandspinal cordandthegrossanatomy ofthesestructuresexamined. Laboratory provides opportunity to study human specimens andmodelstogainathree-dimensionalunderstandingofthecentral nervous system during first part of course. Subsequently, pathways andassociatedstructuresthatmediategeneral sensory, special sensory, autonomic, and somaticmotorfunctionsaredescribedandthe consequencesoflesionsofthesepathwaysdiscussed.Prerequisite:PT 441 or 541. Fall.
PT 631L Neurobiology Lab (0) Lecture-lab. Normal development of the brain and spinal cord and the gross anatomy of these structures examined.Laboratory provides opportunity to study human specimens andmodels to gain a three-dimensional understanding ofthe centralnervoussystemduringfirstpartofcourse.Subsequently,pathwaysandassociatedstructuresthatmediategeneralsensory,special sensory, autonomic, andsomaticmotorfunctionsaredescribedand theconsequences oflesionsofthesepathwaysdiscussed.Prerequisite: PT 441 or 541. Fall.
PT 632 Medical Imaging (2) Covers basic principles of diagnostic imagingpertinenttoclinical practice.Familiarizesstudentwithmagneticresonanceimaging, computedtomography, ultrasonography, and plainfilmstudies ofthespineandextremities.Studentsviewand interpretnormalandabnormalimagesforthesemodalities.Student examinesresearchrelatedtodiagnosticimagingwith regardtosensitivity, specificity, and correlation with clinical findings. Prerequisite: PT 441 or 541. Corequisite: PT 626. Fall.
PT 641 Clinical \& Professional Issues III: Ethics (1) Continuation ofclinicalandprofessionalissuescoursesequencewhichencourages valueclarificationandethicaldecision making and its relationshipto health care. Various situations, dilemmas, and individuals utilized to representtopicsdiscussed.Topicsintendedtodevelopandheighten awareness of dilemmas faced by health care providers and their patients. Lecture. Prerequisite: PT 441 or 541. Fall.
PT 642 Clinical \& Professional Issues IV: Advocacy and Cultural Competency (2) Designed to promote importance of political and socialadvocacy.Contentrelatedtoprofessionaleducation,outcomes assessment,andconsultationaddressed.Studentsexploreprofession's
core value of social responsibility and provideevidence of their own involvement in the community and political arena. Prerequisite: PT 441 or 541. Spring.
PT 643 Leadership \& Administration (3) Examines leadership and administration theories and practice that are specific to physical therapy and rehabilitation. Practical implementation of this information is emphasized with the students actively involved in the processes ofstrategic planning, marketing, supervising,budgeting, effectivedocumentation, and balancinghumanandfiscal resources within health care environments. Additional leadership concepts of motivation, communication, groupdynamics, managingchange,and organizational development are explored in depth. Prerequisite:PT 441 or 541. Spring.
PT 644 Behavioral Psychology (3) Draws together theoretical constructsofpsychology, neuropsychological,andbehavioralmedicine to help explain the etiology of expected behavioral and emotional responses to compromised motor function and neurologic impairment typically experienced by patients in physical therapy rehabilitation and to provide guidance in management of these patients. Prerequisite: PT 441 or 541. Spring.
PT 651 Scientific Inquiry III (2) This course is the third in a series of five courses designed to prepare the graduate to practice in an evidence-based manner and to be an astute consumer and judge of scientificresearch.Topicsincludeexperimental research designsuch as single-subject and group designs, sampling theories, descriptive and survey research, clinical case reports, qualitative research and outcomes research. Prerequisite: PT 441 or 541. Fall.
PT 652 Scientific Inquiry IV (2) This course is the fourth in a series of five courses designed to prepare the graduate to practice in an evidence-based manner and to be an astute consumer and judge of scientific research. Topics include critical appraisal of research relatedinjuryrisk,harm, prognosisstudies andsystematicreviewsare emphasized.Studentcompletecriticalappraisalsofpublishedresearch in a written format and present their appraisals orally. Prerequisite: PT 441 or 541. Spring.
PT 661 Clinical I (5) Active participation in this full-time clinical courseemphasizesdevelopmentofprofessionalbehavior, writtenand verbalcommunicationskills,andevaluation, examination, andinterventions previously addressed in didactic course work. Emphasizes physicaltherapymanagementofmusculoskeletalconditions.Prerequisite: PT 441 or 541. Summer.
PT 670 Special Topics in Physical Therapy (1) This course provides students who have a special interest in furthering their skills in the orthopedic physical therapy setting with advanced diagnostic and treatment interventions. An emphasis will be placed on identifying meaningful impairments hindering functional movement patterns andutilizing appropriatemanualtherapyandmotorcontrolexercise interventionstoimprovemovementquality.Throughlectureandlaboratoryexperiencesthestudentswillbeabletodiagnosismovement patternlimitationsandcreateappropriatetreatmentprogressionsasit relates to their physical therapy evaluation.
PT 724 Patient Management IV: Pediatrics (3) Studies the physical therapy management of children with developmental disabilities. Presentsexaminationandevaluationofinfantsandchildrenwithspecificcongenitalandacquireddisorders.Topicscoveredincludefamily centered care, service delivery models, and service deliverysettings including but not limited to early intervention, schools, acute care andrehabilitation.Laboratoryactivitiesincludemovementanalysis, handling and positioning, developmental activities, use of adaptive equipment, and use of orthoses. Actual patient and video demonstrationsareusedwhen possiblealong with experientialandservice
learning, casestudies, andtreatmentplanningactivities.Prerequisite: PT 441 or 541. Spring.
PT724L Patient Management IV: Pediatrics Lab (0) Studies the physicaltherapymanagementofchildren withdevelopmentaldisabilities. Presentsexaminationandevaluationofinfantsandchildren withspecificcongenitalandacquireddisorders.Topicscoveredincludefamily centered care, service delivery models, and service delivery settings including but not limited to early intervention, schools, acute care andrehabilitation.Laboratoryactivitiesincludemovementanalysis, handling and positioning, developmental activities, use of adaptive equipment, and use of orthoses. Actual patient and video demonstrations areused when possiblealong with experiential and service learning, casestudies, andtreatmentplanningactivities.Prerequisite: PT 441 or 541. Spring.
PT 726 Patient Management VI: Integrated Musculoskeletal (5) Builds on previously acquired examination and intervention skills relatedtomusculoskeletalpatientmanagement.Emphasisonexamination and subsequent evaluation leading to the physical therapy diagnosis for the adultand athletic population. Covers, in detail, evi-dence-basedinterventionsemphasizingmanualtherapyandtherapeutic exercise in lecture and laboratory sessions. Includes examination and intervention models utilized in contemporary clinical practice such asfunctional movement training, and McKenzie. Specific techniques include muscle energy, neural mobilization, trigger points, jointmobilization/manipulation, andsegmentalstabilizationforthe spine.Therapeuticexerciseandsport-specificprogressionsaddressed in relation to commonly encountered physical impairments. Master clinicians and physicians share expertise through classroom and laboratorypresentations relatedtoeachtopiccovered.Studentslearn to utilize these concepts and techniques to develop comprehensive patient management programs. Students may participate in an athletic event coverage observational experience. Prerequisite:PT441 or 541. Fall.

PT 726L Patient Management VI: Integrated Musculoskeletal Lab (0) Buildson previouslyacquired examinationandintervention skills relatedtomusculoskeletalpatientmanagement.Emphasisonexamination and subsequent evaluation leading to the physical therapy diagnosisfor the adultand athletic population. Covers, in detail, evi-dence-basedinterventionsemphasizingmanualtherapyandtherapeutic exercise in lecture and laboratory sessions. Includes examination and intervention models utilized in contemporary clinical practice such asfunctional movement training, and McKenzie. Specific techniques include muscle energy, neural mobilization, trigger points, jointmobilization/manipulation, andsegmentalstabilizationforthe spine.Therapeuticexerciseandsport-specificprogressionsaddressed in relation to commonly encountered physical impairments. Master clinicians and physicians share expertise through classroom and laboratorypresentations relatedtoeachtopiccovered.Studentslearn to utilize theseconcepts and techniques to develop comprehensive patient management programs.Students may participate in anathletic event coverage observational experience. Prerequisite:PT441 or 541. Fall.
PT 727 Community Health (2) Expands the students' knowledge and experiences in the areas of health pro- motion, wellness, and autonomous care. Students will analyze and identify health needs anddevelopandimplementacommunity-basedhealth promotion, prevention, or wellness program. Areas of learning include physical therapist's role in developing and marketing community wellness pro-grams. Additionally,studentsexaminehealth-relatedissuesfor individuals of varying races and ethnicities, national origin, and sexual orientation. Prerequisite: PT 441 or 541. Fall
PT 728 Advanced Screening and Differential (3) Enables students to
functionasindependenthealthcareproviderswiththeabilitytoidentifysignsandsymptomsthatfalloutsidethescopeofphysicaltherapy practiceandtoreferclientsappropriatelytoadditional medical care. Addressesstrategiestoidentifysourceofvarioussignsandsymptoms. Tools used in course include questionnaires based on presenting symptoms.Questionnairestobeusedasaguideinhistory-takingand inter-practitioner communication. Prerequisite: PT 441 or 541. Fall.
PT 742 Clinical \& Professional Issues V: Transition to Practice (2) This course istheculminationoftheseries ofclinicaland professional issuescourses. The courseisfocusedontheprocesses involvedinthe transitionfromstudenttonewprofessional.Contentincludescareer planning topics such as interviewing, résumé building, and professional licensure as well as opportunities and responsibilities of the newprofessional.Theimportanceofbecomingahigh-performance, well-balanced professional will beemphasized. Prerequisite:PT441 or 541. Fall.
PT 751 Scientific Inquiry V (2) This is the last in a series of courses designed to prepare the graduate to practice in an evidence-based mannerandtobeanastuteconsumerandjudgeofscientificresearch. This course is completed concurrently with Physical Therapy 762, Clinical III and Physical Therapy 763, Clinical IV. Students pose answerableclinical questions germane to their current clinical environment related to diagnosis, prognosis, and intervention; search the literature for the current best evidence; and complete a critical appraisal of the evidence. Prerequisite: PT 441 or 541 Corequisites: PT 762, 763.

PT 761 Clinical II (5) Full-time clinical experience emphasizes examination, evaluation, and management of patients with neurologic,neuromuscular,cardiopulmonary,orintegumentary disorders. Further development of professional interaction skills and written and verbal communication addressed. Prerequisite: PT 441 or 541. Summer.

PT 762 Clinical III (5) Full-time clinical experience assists student inachievingclinical competenceasanentry-levelphysicaltherapist. Studentexamines andevaluates patients,anddesigns,implements, andanalyzesaphysicaltherapyplanofcare.Includesdocumentation oftestresultsand patient progress. Can occur in an outpatient, acute care,orrehabilitationsetting.Studentcanmanagemusculoskeletal, neuromuscular,neurologic,andgeriatricpathologies,aswellasdevelopmentaldisabilities andcardiopulmonarydysfunction. Prerequisite: PT 441 or 541. Corequisites: PT 751, 763. Spring.
PT 763 Clinical IV (5) Full-time clinical experience completes achievement of clinical competence as an entry-level physical therapist. Student examines and evaluates patients, and designs, implements, and analyzes a physical therapy plan of care as an entry-level practitioner. Professional communication and socialization further developed.Clinicalexperiencecanoccurinanoutpatient, acutecare, rehabilitation, or specialized setting. Prerequisites: PT 441 or 541. Corequisites: PT 751, 762. Spring.

## Physician Assistant (PA)

Enrollment is limited to students admitted to the Physician Assistant program.All previoussemestercoursesareprerequisitesforcourses offered in the following semester.
PA 510 Medical Literature and EBM (3) This course is designed to expose students to some of the most common study designs found in the medical literature (Review/meta-analysis, correlational, case series,cross-sectional,case-control,cohort,experimental,qualitative) andtheassociatedstatisticalanalysiswithintheclinicalenvironment. A focus is to prepare students to develop and apply the principles of researchdesignwithin populationstoenableanindependentcritical appraisal ofthemedicalliterature.Thesecond partoftheclassfocuses on Evidence-Based Medicine and its application in clinical practice andwith patients.Researchskillsdevelopedinthiscourseemphasize a systematic and scientific approach to problem solving.
PA 511 Human Physiology (4) This course focuses on the aspects of human physiology that are most important to build a basic science foundation for future clinical practice. The focus is that all disease and injury to the human body is a deviation from normal anatomy and physiology. Material will focus on normal physiology (and some anatomy) andclinicallyrelevantpathophysiologytosetafoundation for future clinical courses. Instruction will introduce how clinicians use "breaks" in homeostasis to diagnosis and treat disease. This course material is linked to PA 530 Diagnostic tests and PA 531 Medical Imaging.
PA 520 Pharmacology (4) The goal of pharmacology is to appreciate theprinciplesofdrugabsorption, distribution, metabolism,excretion and the mechanisms of drugs to enable the rational use of effective agents in the diagnosis and treatment of disease. Major emphasis is placed on mechanism of action, indications, adverse effects, drug interactions.
PA 521 Behavioral Health (3) This course examines the various social and behavioral sciences domains. A focus is on diagnosis, treatment and preventionofpsychiatric/behavioralconditionsusingtheDSM-V as a guide. Additionally, normal and abnormal development across the life span is covered. This includes detection and treatment of substance abuse, human sexuality, issues in death, dying and loss; responsetoillness,injuryandstress;principlesofviolenceidentification and prevention.
PA 530 Diagnostic Tests (3) This course focuses on common medical diagnostictestsusedtohelpdiagnoseavarietyofmedical conditions. Students will learn normal values and abnormal values to interpret basicprimarycarediagnostictests. Studentswill beginfoundational workonusinglaboratoryfindingstobuilddifferential diagnosis, and monitoring of disorders commonly found in clinical practice. The course sequence is paired with PA 510 (Human Physiology).
PA531 Medical Imaging (3) This course focuses on common medical imaging tests used to help diagnose a variety of medical conditions. Students will learn what normal images are and abnormal images to interpret basic primary care diagnostic pathology. Students will begin foundational work on using imaging findings to build differential diagnosis, and monitoring of disorders commonly found in clinical practice.
PA 532 12-Lead EKG (1) This course will provide the physician assistantstudentwiththebasicunderstandingofelectrocardiography and how itis measured. Students will learnhowto interpreta 12-lead electrocardiogram (EKG) for heart rates, rhythms, blocks, injury, ischemia and infarction. Students will also learn how to identify effectsofdrugs,electrolytesdisorders, pacemakersorothersystemic disease processes.

PA 540 The PA Profession (2) his course will provide the physician assistant student with instruction in the PA profession. Instruction will cover the historical development of the profession and current trends/events. Topics will include the physician-PA team relationship, political issues that affect PA Practice, documentation, professional conduct, PA certification and licensure; certification maintenance; malpractice insurance; coding and billing. The role of the PA Organizations will also be discussed.
PA 541 Medical Ethics (1) This course covers the instruction in principles and practice of medical ethics. It will provide a method and examples for identifying, analyzing, and resolving ethical issues in clinical medicine. Additionally, in-depth discussions will examine a widevarietyofethicaldilemmasencounteredinhealthandmedicine. These will be used to help students apply a structured approach.
PA 542 Health Systems and Policy (3) This course discusses health caredeliverysystemsandHealth policies. Thecoursewillfocusonthe settingsforhealth caredeliveryandpeoplewho providehealth care. Thecoursewillcoverkeymanagementand policyissuesincontemporaryhealthsystemsandtheprocessofpublicpolicydevelopmentand its impact on health system improvement. Students will learn how toevaluatetheperformanceofhealthsystems. Specialattention will be on the US Healthcare system. Finally, healthcare reform will be covered from a historical perspective to modern day events.
PA 544 Cultural Competence and IPE (2) This course covers the corecultural competenciesforphysicianassistantstudentswithinthe domainsofknowledge, professionalattitudeandskills. Culturecom-petenceinhealthcarecombinesthetenetsofpatient/family-centered care with an understanding of the social and cultural influences that affect the quality of medical services and treatment provided. This course also focuses on interprofessional education (IPE). It provides the knowledge and skills that foster professional development and team participation in the interdisciplinary healthcare environment.
PA 545 Introduction to Clinical Practice (1) This course will provide early exposures to the healthcare system, patients and professional communication. The primary tenet of this course is to prepare students for future transition into clinical thinking and clinical exposures.StudentswillshadowPAs andotherhealthcareproviders to understand the various roles and responsibilities of PAs and the healthcare team. A second course objective is the introduction of lifelonglearning/continuingeducation.Studentswillattendandparticipate in several grand round lectures provided at both Deaconess Hospitals and St. Vincent's Evansville.
PA 612 Human Structure (gross Anat) (6) This course is a cadaver dissection gross anatomy course that will be taught in conjunction/ partnership with the Indiana University School of Medicine Evansville. This course will focus on normal anatomy but will emphasizes those aspects of human anatomy that are most important to an understanding ofpatho-anatomy,physicaldiagnosis ofdisease, and an interpretation of patient clinical assessment.
PA 622 Clinical Medicine I (6) This course is the first of a two part series covering clinicalmedicalcareacrossthelifespanfromprenatal throughelderlytoincludepreventive,emergent,acute,chronic,rehabilitative, palliative and end-of-life care. The course focuses on the general findings, disease etiology, clinical findings(signs and symptoms,tests, etc.), differentialdiagnosisandnon-pharmacologicmanagement of specific disease states. The course topics will be paired with PA 624 (Therapeutics 1), for pharmacologic interventions.
PA 623 Therapeutics I (3) This course is the first of a two part series covering therapeutic interventions on the clinical disease topics covered in the Clinical Medicine Course Series. This course is specifically paired with the disease topics covered in PA 622 (Clinical

Medicine 1). These interventions will cover therapeutic care across the life span from prenatal through elderly to include preventive, emergent,acute,chronic,rehabilitative,palliativeandend-of-lifecare. Focus will be on drug class, indication, contraindications, dosing, adversereactions, druginteractions,safety/monitoring, pharmacology, cost, compliance, and alternatives.
PA 624 Clinical Medicine II (6) This course is the second of a two partseriescoveringclinicalmedicalcareacrossthelifespanfromprenatalthroughelderlytoincludepreventive,emergent,acute,chronic, rehabilitative, palliative and end-of-life care. The course focuses on the general findings, disease etiology, clinical findings (signs and symptoms, tests, etc.), differential diagnosis and non-pharmacologic managementofspecificdiseasestates. Thiscoursetopicswillbepaired with PA 625 (Therapeutics 2), for pharmacologic interventions.
PA 625 Therapeutics II (3) This course is the second of a two part series coveringtherapeuticinterventionsontheclinicaldiseasetopics covered in the Clinical Medicine Course Series. This course is specifically paired with the disease topics covered in PA 624 (Clinical Medicine2). These interventions will covertherapeutic care across the life spanfromprenatalthrough elderlytoincludepreventive,emergent, acute, chronic, rehabilitative, palliative and end-of-life care. Focus will be on drug class, indication, contraindications, dosing, adverse reactions, druginteractions,safety/monitoring, pharmacology,cost, compliance, and alternatives.
PA 632 History and Physical Exam I (3) This course is the first of a twopartseriesteaching physicianassistantstudentshowtoperform an accurate and thorough history and physical exam to be able to makediagnosticandtherapeuticdecisions. Studentswilllearnmedical documentation for a full $\mathrm{H} \& \mathrm{P}$ and incorporate this knowledge to developdiagnosis, differential diagnosis and treatment plans. Interpersonal communication skills and professionalism will be emphasized in the instruction of all patient encounters. Students will also learn about patient instruction, education and treatment plans.
PA 633 History and Physical Exam II (3) This course is the second of atwo partseriesteaching physicianassistantstudents howto perform an accurateand thorough history and physical exam to beable to make diagnostic and therapeutic decisions. This course focused on focused and specialty exams. Students will learn medical documentation for a full H\&P and incorporate this knowledge to develop diagnosis, differential diagnosis and treatment plans. Interpersonal communication skills and professionalism will beemphasized inthe instruction of all patient encounters. Students will also learn about patient instruction, education and treatment plans
PA 634 Clinical Skills (5) This course is designed to provide instructionand practice in a widerange ofmedical and surgical procedures. Afocusisplacedon primarycareoutpatient procedureswithdemonstration of proficiency. Students will also be introduced to other procedures that could be expected of by PAs in specialty settings. Studentswillalsobeexposedtocurriculumsofbasiclifesupportand Advanced Cardiac Life Support Courses.
PA 645 Inter Comm \& Case-Based Learn (1) This course is designed to providestudentswithacoursetointegratematerial "horizontally" from previous courses. Students will work on communication skills by developing a clinical case and presenting the case to their fellow classmates. Students will obtain history and physical exam information and develop a differential diagnosis through a treatment plan. Faculty functions as a guide through the process to develop both integration of clinical knowledge, but also interpersonal communications skills.
PA 700FormativeExperience (2)This course is designedtoassessthe students preparedness to enter the clinical (PA3) year, and identify
any areas for improvement prior to taking the National Board Exam. Studentswillformativeassesstheirentrylevelcompetencyin primary care medicine knowledge, primary medicine clinical skills, and professionalismto passthiscourse.Thiscourseisa"pre-test"assessment for the accreditation requirement for program endorsement of students, and must be passed to be eligible to sit for the PANCE exam. It also determines the content material for the Core Review course series.
PA 750 Family Medicine (4) This course is designed to provide studentswith an exposureand experiencesina primarycareoutpatient setting. The goal is for students to gain exposure to the approach to patients in this specialty and identify the fundamental principles of family medicine/primary care as they relate to the clinical care of patients.Studentswillbeexposedtomedical careacrossthelife-span. With the guidance of the clinical preceptor, students will perform history and physical exams, obtain diagnostic testing and develop differential diagnosis/treatment plans. Students will learn to communicateeffectivelywithmedical providers, preceptor, patientsand family members. Studentmay perform procedures at the discretion of the preceptor.
PA 751 Internal Medicine (4) This course is designed to provide students with an exposure and experiences in an internal medicine setting. The goal is for students to gain exposure to the approach to patients in this specialty and identify the fundamental principles of internal medicine/primary care as they relate to the clinical care of patients.Studentswillbeexposedtomedical careacrossthelife-span. With the guidance of the clinical preceptor, students will perform history and physical exams, obtain diagnostic testing and develop differential diagnosis/treatment plans. Students will learn to communicateeffectivelywithmedical providers, preceptor, patientsand family members. Studentmay perform procedures at the discretion of the preceptor.
PA 752 Mental Health (4) This course is designed to provide students with an exposure and experiences in the field of Mental Health. The goalisforstudentstogainexposuretotheapproachtopatientsinthis specialtyandidentifythefundamental principles ofMentalHealthas they relate to the clinical care of patients. Students will be exposed to medical care across the life-span. With the guidance of the clinical preceptor,students will perform history and physical exams, obtain diagnostictestinganddevelopdifferentialdiagnosis/treatmentplans. Students will learn to communicate effectively with medical providers, preceptor, patients and family members. Student may perform procedures at the discretion of the preceptor.
PA 753 Pediatric Medicine (2) This course is designed to provide students with an exposure and experiences in a pediatric medicine setting. The goal is for students to gain exposure to the approach to patients in this specialty and identify the fundamental principles of pediatric medicine as they relate to the clinical care of patients. With the guidance of the clinical preceptor, students will perform history andphysicalexams,obtaindiagnostictestinganddevelopdifferential diagnosis/treatmentplans. Students willlearntocommunicateeffectivelywithmedical providers, preceptor,patientsandfamilymembers. Student may perform procedures at the discretion of the preceptor.
PA 755 General Medicine (2) This course is designed to provide students with an interest in primary care an additional exposureand experiencesinthefield ofprimarycare.Thisexperienceisfocusedon family or internal medicine with special attention to womens health and pediatric populations. Students will beexposed to medical care across the life-span. With the guidance of the clinical preceptor, students will perform history and physical exams, obtain diagnostic testing anddevelopdifferentialdiagnosis/treatmentplans.Students willlearntocommunicateeffectivelywithmedical providers, precep-
tor, patientsandfamilymembers.Studentmayperformproceduresat the discretion of the preceptor.
PA 760 General Surgery (4) This course is designed to provide studentswithanexposureandexperiencesinasurgerysetting. Thegoal is for students to gain exposure to the approach to patients in this specialty and identifythefundamental principles ofgeneral surgery asthey relatetotheclinical careofpatients. Studentswill beexposed to medical careacross the life-span. With the guidance oftheclinical preceptor, students will perform history and physical exams, obtain diagnostictestinganddevelopdifferentialdiagnosis/treatmentplans. Students willlearn to communicate effectively with medical providers, preceptor, patients and family members. Student may perform procedures at the discretion of the preceptor.
PA 761 Emergency Medicine (4) This course is designed to provide studentswithanexposureandexperiencesinanemergencymedicine setting. The goal is for students to gain exposure to the approach to patients in this specialty and identify the fundamental principles of emergencymedicineastheyrelatetotheclinical careofpatients. Studentswillbeexposedtoemergencymedical careacrossthelife-span. With the guidance of the clinical preceptor, students will perform history and physical exams, obtain diagnostic testing and develop differential diagnosis/treatment plans. Students will learn to communicateeffectivelywithmedical providers, preceptor,patientsand family members. Studentmay perform procedures atthediscretion of the preceptor.
PA 762 Orthopedics (4) This course is designed to provide students with an exposure and experiences in the field of orthopedics. The goalisforstudentstogainexposuretotheapproachto patientsinthis specialty and identify the fundamental principles of orthopedics as theyrelatetotheclinical careof patients. Studentswill beexposed to orthopediccareacrossthelife-span. Withtheguidanceoftheclinical preceptor, students will perform history and physical exams, obtain diagnostictestinganddevelopdifferentialdiagnosis/treatmentplans. Students will learn to communicate effectively with medical providers, preceptor, patients and family members. Student may perform procedures at the discretion of the preceptor.
PA 763 Cardiology (2) This course is designed to provide students with an exposure and experiences in the field of Cardiology. The goal is for students to gain exposure to the approach to patients in this specialty and identify the fundamental principles of Cardiology as they relatetotheclinicalcareof patients. Students will beexposed to cardiology medical care across the life-span. With the guidance of the clinical preceptor, students will perform history and physical exams,obtaindiagnostictestinganddevelopdifferentialdiagnosis/ treatmentplans. Studentswilllearntocommunicateeffectively with medical providers, preceptor, patientsandfamilymembers. Student may perform procedures at the discretion of the preceptor.
PA 764 Women's Health (2) This course is designed to provide studentswith anexposureandexperiences inthefield ofobstetricsand gynecology (OB/GYN). The goal is for students to gain exposure to theapproachtopatientsinthisspecialtyandidentifythefundamental principles of Women's Health as they relate to the clinical care of women. Studentswillbeexposedtomedical careacrossthelife-span. With the guidance of the clinical preceptor, students will perform history and physical exams, obtain diagnostic testing and develop differential diagnosis/treatment plans. Students will learn to communicateeffectivelywithmedical providers, preceptor,patientsand family members. Studentmay perform procedures at the discretion of the preceptor.
PA 765 Elective Clinical Experience (2) This course is designed to provide students with an exposure and experiences in the medical field of their choice. The goal is for students to gain exposure to the
approachtopatientsinaspecialtythatisnotrequiredandidentifythe fundamental principles of this specialty as they relate to the clinical careofpatients. Withtheguidanceoftheclinical preceptor, students will perform history and physical exams, obtain diagnostic testing and develop differential diagnosis/treatment plans. Students will learntocommunicateeffectivelywithmedical providers, preceptor, patientsandfamilymembers. Studentmayperformproceduresatthe discretion of the preceptor.
PA 766 Specialty Elective Clin Exp I (2) This course is an elective course for those students wanting additional exposure to specialty medicine of their choice. Students will choose either PA 755 or PA 766,PA 767. Thegoal isforstudentstogain exposure to the approach to patients in a specialty that is not required and identify the fundamental principles of this specialty as they relate to the clinical care of patients. With the guidance of the clinical preceptor, students will perform history and physical exams, obtain diagnostic testing and developdifferentialdiagnosis/treatmentplans. Studentswilllearnto communicateeffectivelywithmedical providers, preceptor, patients andfamilymembers. Studentmayperformprocedures atthediscretion of the preceptor.
PA 767 Specialty Elective Clin Exp II (2) This course is an elective course for those students wanting additional exposure to specialty medicine of their choice. Students will choose either PA 755 or PA 766,PA 767. Thegoal is forstudentsto gainexposure totheapproach to patients in a specialty that is not required and identify the fundamental principles of this specialty as they relate to the clinical care of patients. With the guidance of the clinical preceptor, students will perform history and physical exams, obtain diagnostic testing and developdifferentialdiagnosis/treatmentplans. Studentswilllearnto communicateeffectivelywithmedical providers, preceptor, patients andfamilymembers. Studentmayperformprocedures atthediscretion of the preceptor.
PA 770 Core Content I (1) This course is a three part course series designedtoprovidestudentswithbroadbasedclinicalknowledgethat may not be found within the supervised clinical practice encounters (SCPEs), but is needed for successful clinical practice. It also serves to review material previously taught within the curriculum that is required for physician assistant practice. Finally, this course series servestoevaluatestudentsonthePAProgramcompetenciesand prepare students for the Physician Assistant National Certifying Exam (PANCE).

PA 771 Core Content II (1) This course is a three part course series designedto providestudentswithbroadbasedclinicalknowledgethat may not be found within the supervised clinical practice encounters (SCPEs), but is needed for successful clinical practice. It also serves to review material previously taught within the curriculum that is required for physician assistant practice. Finally, this course series servestoevaluatestudentsonthePAProgramcompetenciesand prepare students for the Physician Assistant National Certifying Exam (PANCE).
PA 772 Core Content III (1) This course is a three part course series designedto providestudentswithbroadbasedclinicalknowledgethat may not befound withinthesupervised clinical practice encounters (SCPEs), but is needed for successful clinical practice. It also serves to review material previously taught within the curriculum that is required for physician assistant practice. Finally, this course series servestoevaluatestudentsonthePAProgramcompetenciesandprepare students for the Physician Assistant National Certifying Exam (PANCE).
PA 773 Interprofessional Educ Exp (2) This course is designed to providestudentswithanexposureandexperiencesinaprofessionother than their own to gain exposures to another member of the medical
team. Thegoalisforstudentstoexperiencetheapproachto patients fromadifferenthealthteamperspectiveandhowcarereceivedfrom thishealth careteammembercomplementsthetraditional careaPA would provide.
PA 774 Summative Experience (2) This course is designed to assess thestudent'sintegrationofthe PAProgram'scurriculum, competencies and preparednesstositfortheNational Boardsandenterclinical practice. Students mustshowa minimumentrylevelcompetencyin primary care medicine knowledge, primary medicine clinical skills, and professionalism to pass this course. This course is an accreditationrequirementforprogramendorsementofstudents,andmustbe passed to be eligible to sit for the PANCE exam.

## Psychology (PSYC)

PSYC 526 Adv Child \& Adolescent Development (3) Examines developmentalstagesfromconceptionthroughadolescence,givingspecial emphasistophysical,cognitive,social,andemotionalaspectsrelated tomaturationalaswellaslearning processes.Thiscoursebuildsupon Psychology 226 (Child and Adolescent Psychology) but delves furtherintoeachtopicsothateachstudent gains agreaterappreciation forandunderstanding ofthe concepts and processes involvedinthe developmentofchildren.Prerequisites:Psychology226oradmission into a master's program or permission of the instructor. Summer, offered periodically.

## Public Health (PH)

PH 501 Epidemiology (3) This course covers applications of epidemiologic methods and procedures and the study of the distribution and determinants of health and diseases, morbidity, injuries, and mortality in populations. Epidemiologic methods for the control of conditionssuch asinfectiousandchronicdiseases, mentaldisorders, community and environmental health hazards, and unintentional injuries are discussed. Other topics include quantitative aspects of epidemiology,forexample,datasources,measuresormorbidityand mortality, evaluation of association and causality, and study design. Spring.
PH 509 Environmental Health (3) Environmental health is concerned with the biological chemical, and physical influences on humanhealth. Thecoursewillexaminetopicssuchasenvironmental health determinants, generalmechanisms oftoxicity, genetic, physiologic, and psychosocial factors related to environmental health, environmentalriskassessmentmethods,federalandstateregulatory guidelinesand programs,environmentaljustice,riskcommunication, and prevention and management of environmental hazards. Fall.
PH 515 Health Behavior (3) Health Behavior is an overview of the health behaviors contributing most dramatically to increased morbidity and mortality in the United States. The course emphasizes public health interventions, theoretical models, and strategies to promotehealthbehaviorsanddiscourageunhealthybehaviors. The course examines consequences, patterns, risk factors, and change/ interventionsforeachbehaviororproblem. Behaviorsareexamined frommultipleperspectives(e.g.individual,social,environmental)and withasystemsperspectiveinmind, illuminatingtheinterconnecting influencesonbehaviors. Healthbehaviorandbehaviorchangeinterventionsarepresentedinthecontextofcurrentresearchandtheory. The course also examines the role of health disparities, public health policy,currentdebate,healthbehaviortheory, andemergingresearch. Fall.
PH 525 Biostatistics (3) This course will cover biostatistical methods
andapplications relatedto publichealth. Topicswillincludedescriptive statistics, probability theory, and a wide variety of inferential statisticaltechniquesthat canbeused tomake practical conclusions aboutempiricaldata.Learnedstatisticalknowledgewillbeappliedto understanding and designing research studies. Fall and Spring.
PH 530 Health Economics (3) The course is designed to introduce studentstothefield ofHealthEconomics. Theprovisionand production of health carehave different characteristics and incentives from otherconsumergoodsmakinghealthrelatedmarketsa uniquetopic for study. Topics that will be examined include economic concepts, why health is different from other goods, aspects of the U.S. health care market, health care in other countries, health care reform, and economic evaluation techniques. Fall.
PH 535 Public Health Law \& Ethics (3) The course is focused on the use of law and policy tools to promote access to healthy living conditions as an important determinant of population health and community well-being. Priorities andopportunities will be identifiedfor publichealth law and policy interventions that seek to characterize, prevent, andameliorateriskstopopulationhealth.Legal powersand duties of the state will be discussed. We will also discuss individual rights as limitations on the power of the state to act in furtherance of the common good. Through case studies and simulations on topics such as sexually transmitted infections, tobacco control, obesity, exposuretoenvironmentalhazards, and publichealthemergencies, students will engage in an experiential and problem-based study of law as a tool for promotion of population health, well-being, and equity. Fall.

PH 540 Strategic Mngt in Health Prog (3) The course is designed to providestudentswiththetoolstheyneedtotaketheirplaceasleaders of public health or healthcare organizations. The course introduces concepts of governance, strategic thinking, systems thinking, and implementation science. Students will learn the principle tenets of governance, strategy, and financial leadership. Spring.
PH 542 Health Systems \& Policy (3) The aim of this course is to provide students with an overview of the U.S. health care system, its components, and the policy challenges created by its organization. The course will focus on the major health policy institutions and importantissuesthatcutacrossinstitutions, includingprivateinsurers andthefederal/statefinancing programs. Attention willalsobegiven to disparities in access to care, the role of pharmaceuticals in health care and the pricing and regulation of the pharmaceutical industry, the quality ofacre, the challenges oflong-term care, and the aging of the population, and the drivers of cost growth. Spring.
PH 543 Population-Based Health (3) This course presents selected information, concepts, and methods from the field of public health. Topics concerning the history, organization, financing, and services of the public health system are discussed. All topics are presented from a population-based perspective. Summer.

PH 547 Survey Research Methods (3) The course provides an intro-ductiontopopulationsurveystypicalindescriptiveandanalyticepidemiologicresearch. Thecoursehas astrongemphasisontelephone questionnairemethods,butalsoincludesotherdatacollectionmodes and their relative advantages and disadvantages. Survey sampling, survey planninganddatacollection,computerinterviewinganddata management techniques for research surveys are emphasized. The courseincludesgeneralizedmethodsanddidacticmaterialsaswellas case studies. Spring.
PH 580 Programs, Problems, \& Policies in Public Health (3) This courseexaminesthemyriad of programsand policiesinpublichealth
via a developmental approach to learning about health problems. The course will cover a variety of topics, including state programs andpolicies, maternalandinfanthealth, programplanning,research, monitoring, and advocacy. Spring.
PH 590 Integrative Experience (3) This class serves as the capstone courseforpublichealth students. Itprovides anopportunityforstudentstoworkon publichealth practice projectsthatare of particular interest to them. The goal is for students to synthesize, integrate, and apply the skills andcompetencies they have acquired to a public healthproblemthatapproximatesaprofessional practiceexperience. Spring.
PH598Public Health Internship (3) A comprehensive and integrated application of the curriculum required by the MPH program which allows students to demonstrate professional competency in public health within a practice setting. The internship is an integral part of the MPH curriculum. It is intended to broaden the student's public health perspectives and provide experience in applying the theory and content learned in didactic courses in publichealth practice.It is thereforeexpectedthatthroughtheinternshipexperiencethestudent willhavetheopportunitytointeractwith publichealth professionals and participate in activities that constitute public health. It is further expected that the student will beexposed to various paradigms and waystosolvepublichealth problems, withexperiencesthatreinforce communication principles, use of relevant information technology, sensitivity to diversity and cultural issues, and enhance a student's leadership, program planning, and systems thinking skills. Fall, Spring and Summer.

## Public Service Administration (PSA)

Course credits apply only to the PSA program.
Enrollment is limited to students admitted to the public service administration master's degree program.
PSA 505 Public Service Leadership (3) Leadership that grows from sharedvision,teamwork, and communication isessentialforsuccess in public service. Focuses on the requisite knowledge, skills, and dispositionsforeffectiveleadership.Studentslearnleadershiptheories and principles and assess their own leadership styles for a practical understanding of application of concepts.
PSA 506 Ethics \& Jurisprudence (3) Emphasizes legal and ethical processesandtheirapplicationtopublicserviceorganizations,administrators, staff, and employees. Includes ethical dimensions of the decision making process and currentethical issues in public service.
PSA 507 Applied Research and Program Evaluation (3) Examines research principlesandmethodsastheycontributetoorganizations committed to public service. Provides experience in developing a research proposal and formal critique of research literature.
PSA 508 Social Justice and Diversity (3) Diversity dynamics will be consideredfromtheindividual group, andorganization viewpoints. Focusesonattitudes regardingdiversityaswellasskillsforpromoting and increasing diversity and working with diverse populations.

PSA 512 Organizational Behavior (3) Uses various organizational, managerial, andbehavioraltheories,concepts, and principlesinanalyzing, diagnosing, predicting, and guiding human behavior within organizations committed to public service.Emphasizes motivation, leadership, change, communication, personality, group dynamics, and organization development.
PSA 514 Management Theory and Human Resources (3) The study ofmanagementtheoryandpracticeasappliedbymanagersofpublic
service based organizations. Emphasizes analysis of the manager's role, interactionswith people,theorganization, andtheenvironment. Special emphasis on human resources issues.
PSA 516 Information Systems (3) Provides an understanding of the conceptsandapplicationsofinformationsystemsusedinthemanagement of organizations committed to public service.
PSA 520 Public Service Marketing (3) Integrates longrange goal planningwith dimensionsofmarketingfororganizationscommitted to public service. Concepts, techniques, and theories used in the planning and management of marketing in the public service organizations.
PSA 528 Public Service Finance (3) Focuses on the acquisition, allocation, and management control of financial resources within organizations. Includes cost analysis, financial position analysis and strategies, reimbursement, pricing policies, budgeting, capital expenditure, analysis offinancial reports, and informal and external controls.
PSA 543 Grant Writing (3) Provides information targeted to increase administratoreffectiveness in identifying external funding sources, developingneedsintocoherentproposalideas,andwritingsuccessful proposals. Combines instruction and practical exercises to takeparticipants through grant proposal preparation.
PSA 567 Measurement and Statistics (3) Focuses on the analysis of data common to development of business plans or grant proposals. Includes data description, elements of probability, distribution of randomvariables,estimationandconfidenceintervals,binomialand normaldistributions, hypothesistesting, contingency tables, regression analysis, and use of SPSS program to analyze data.
PSA 590 Decision Making (3) Examines decision making in public serviceadministrationbyextensiveuseofcasestudies.Materialfrom other PSA courses is integrated into the study of decisions facing all types of organizations committed to public service.

## Sociology (SOC)

SOC 586 Death, Dying, Bereavement (3) This graduate course explores thanatology-the study of death-using a sociological lens. Examinesattitudesandbehaviorstowarddying, death, and bereavement from a variety of theoretical and comparative perspectives. Topics of study include: cultural traditions, rituals, practices, and attitudestowarddeath;self-awarenessandvalueidentificationconcerningdeathanddying;griefandbereavement;theimpactofdeath and dying across the life span; and end-of-life planning.

This checklist is informational only. The University reserves the right to modify regulations and curriculum at any time.
Please see the automated degree audit on Student Planning for the most up-to-date program information.

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Additional information may be obtained from the appropriate offices at the University. All correspondence should be addressed to the University of Evansville, 1800 Lincoln Avenue, Evansville, Indiana 47722. The University's main telephone number is 812-4882000.

## Admission and Prospective Student Information

Visitors are welcome at the University of Evansville. The Office of Admission is located in Room 104, Olmsted Administration Hall. Advance appointments are recommended for campus visits. For appointments, call 812-488-2468 or 800-423-8633, ext. 2468.
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[^0]:    College of Arts and Sciences
    The college providesqualityliberal education inthearts, humanities, the natural and social sciences, as well as professional training in the fine and performing arts and creative writing. The programs of study are organized into departmental units (where appropriate) as follows:

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    Archaeology
    Art History
    Department of Art
    Art Education
    Art and Associated Studies; Studio Art
    Pre-Art Therapy Concentration
    Visual Communication Design
    Department of Biology
    Applied Biology
    Applied Biology - Education
    Professional Biology
    Department of Chemistry
    Chemistry
    Chemistry - Education
    Biochemistry
    Business Emphasis
    Classical Studies
    Department of Communication
    Communication
    Advertising and Public Relations Specialization
    Journalism Specialization
    Multimedia Production Specialization

