## Majors and Minors Offered at UWP

The index, which follows, provides a listing of majors and minors offered at UW-Platteville. More detailed information is given on each major, minor, and various emphases in the colleges portion of this catalog.

A complete listing of majors and minors approved for teaching licensure can be found under the School of Education.

### Majors
- Accounting
- Agricultural Business
- Agricultural Education
- Animal Science
- Art
- Art Education
- Biology
- Broad Field Science
- Business Administration
- Chemistry
- Civil Engineering
- Communication Technologies
- Comprehensive Business and Economics
- Computer Science
- Criminal Justice
- Electrical Engineering
- Elementary Education
- Engineering Physics
- English
- Environmental Engineering
- Foreign Language
  - (German and Spanish)
- Geography
- History
- Individually Contracted Major
- Industrial Engineering
- Industrial Technology Management
- International Studies
- Mathematics
- Mechanical Engineering
- Music
- Music Education
- Ornamental Horticulture
- Philosophy
- Physical Education
- Political Science
- Psychology
- Reclamation, Environment and Conservation
- Social Science Comprehensive
- Software Engineering
- Soil and Crop Science
- Technology Education
- Theater

### Minors
- Accounting
- Agricultural Business
- Animal Science
- Art
- Biology
- Biotechnology
- Broadcasting
- Building Construction Management
- Business Administration
- Chemistry
- Computer Integrated Manufacturing
- Computer Science
- Creative Writing
- Criminal Justice
- Drafting / Product Development Technology
- Early Childhood Economics
- English
- English - Secondary Education
- Environmental Science
- Ethnic Studies
- Food Marketing
- Forensic Investigation
- French
- French - Secondary Education
- Geography
- Geology
- German
- German - Secondary Education
- Health Education
- History
- History - Secondary Education
- Imaging Media
- Industrial Control Systems Technology
- Interdisciplinary Studies
- International Studies
- Journalism
- Language Arts
- Mathematics
- Mathematics - Middle Education
- Mathematics - Secondary Education
- Metal Processing Technology
- Microsystems and Nanotechnology
- Music
- Music - Choral
- Music - Instrumental
- Music Theater
- Natural Science
- Ornamental Horticulture
- Philosophy
- Physical Education
- Physics
- Physics - Secondary Education
- Plastics Processing Technology
- Political Science
- Production and Manufacturing Management
- Psychology
- Renewable Energy
- Safety, Occupational
- Social and Environmental Justice
- Social Science
- Sociology
- Soil and Crop Science
- Spanish - Secondary Education
- Special Education / Inclusion
- Speech Communication
- Teaching English as a Second or Other Language
- Technical Theater
- Theater
- Theater Performance
- Theater - Secondary Education
- Women's Studies
# Table of Contents

## I. The University

General Catalog Information ........................................................................................................................................ 5

About UW-Platteville .................................................................................................................................................. 6
  Our Mission ........................................................................................................................................................ 6
  Faculty and Academic Staff ............................................................................................................................... 6
  Students .......................................................................................................................................................... 6
  Safety and Health Policy ................................................................................................................................. 6
  Facilities ....................................................................................................................................................... 6
  The Platteville Community .............................................................................................................................. 7
  History ......................................................................................................................................................... 7
  The University Seal and School Colors ......................................................................................................... 7

Admission to the University .................................................................................................................................... 8
  Admission Categories .................................................................................................................................... 8
  New Freshman Admission Guidelines ......................................................................................................... 9
  Transfer Policies ........................................................................................................................................... 10
  Re-entrant Requirements ............................................................................................................................... 11
  International Student Admission Policies ................................................................................................... 11
  Tri-State Initiative ......................................................................................................................................... 12

Credits by Examination or Review .................................................................................................................... 13
  Advanced Placement (AP) Examination ....................................................................................................... 13
  College Level Examination Programs (CLEP) ............................................................................................ 16
  Departmental Test-Outs and Waivers ........................................................................................................... 17
  Advanced Credit for Veterans ....................................................................................................................... 17

Registering For and Taking Courses ................................................................................................................ 18
  Advance Registration and Orientation for New Freshmen ............................................................................ 18
  Registration for Continuing and Transfer Students .................................................................................... 18
  Policies Affecting Student Registration ....................................................................................................... 18
  Tuition and Fee Policies .................................................................................................................................. 19
  Excess Credit Policy ..................................................................................................................................... 20
  Dropping Courses ......................................................................................................................................... 20
  Seniors Enrolled in Graduate Courses ......................................................................................................... 21
  Family Educational Rights and Privacy Act (FERPA) .................................................................................... 24

Other University Policies ..................................................................................................................................... 22
  Class Attendance .......................................................................................................................................... 22
  Grades ........................................................................................................................................................... 22
  Scholastic Honors ......................................................................................................................................... 22
  Declaring/Changing Majors .......................................................................................................................... 23
  Transcripts ................................................................................................................................................... 23
  Simultaneous Enrollment at Another Institution .......................................................................................... 23
  Academic Probation and Suspension ........................................................................................................... 24
  Student Grievances and Discipline .............................................................................................................. 24
  Withdrawal from the University .................................................................................................................... 25
  Requirements for the Associate's Degree ...................................................................................................... 25
  Requirements for the Bachelor's Degree ........................................................................................................ 26
  Graduation .................................................................................................................................................. 26
Financial Aid .................................................................27
Financial Aid Programs ..................................................27
University Refund Policy ................................................27
Scholarships .......................................................................28

General Education Requirements and Approved Course Listings ..................................................29
Competencies .....................................................................29
Liberal Arts Areas ..............................................................30
General Education Credit Requirements .........................31
Approved Course Listings ..................................................32

Special Academic Programs ..............................................38
University Honors Program ...............................................38
Pioneer Academic Center for Community Engagement (PACCE) ........................................38
First-Year Experience Program .........................................39
Pre-Professional Programs .................................................39
Cooperative Education Programs .......................................42
Institute for Study Abroad Programs ....................................42
National Student Exchange Program ....................................42
Continuing Education ........................................................42
WisLine Teleconference Service .........................................43
Remedial Courses in English and Mathematics .................43
Individually Contracted Major .............................................44

Information Services ........................................................45
Karrmann Library ................................................................45
Information Technology ....................................................45
Learning Technology Center .............................................46
Media Technology Services ...............................................46

Student Affairs ...............................................................47
Advising and Career Exploration Services (ACES) ..............47
Athletics ..........................................................................47
Career Center ....................................................................47
Center for the Arts .............................................................47
Children’s Center ..............................................................47
Counseling Services ..........................................................48
Dining Services ..................................................................48
Greek Life ..........................................................................48
Student Health Services ....................................................48
Intramurals .......................................................................49
Math Learning Center ........................................................49
Multicultural Educational Resources Center .......................49
Harry and Laura Nohr Gallery ............................................49
Performing Arts Series .....................................................49
Pioneer Activity Center ......................................................49
Pioneer Involvement Center .................................................50
Pioneer Student Center ......................................................50
Office of Rental Issues ......................................................50
Residence Halls ..................................................................50
Service for Students with Disabilities .................................51
Student Organization Development ....................................51
Student Support Services ..................................................51
Technical and Event Services ..............................................52
Textbook Center ..............................................................52
Patricia A. Doyle Women’s Center .......................................52
Writing and Tutoring Resource Center ...............................52
II. The Colleges

College of Business, Industry, Life Science and Agriculture ................................................................. 53
School of Agriculture ............................................................................................................................... 54
Department of Biology ............................................................................................................................. 72
Department of Business and Accounting ................................................................................................. 79
Department of Communication Technologies ......................................................................................... 84
Department of Industrial Studies ............................................................................................................. 88

College of Engineering, Mathematics and Science ................................................................................. 95
Department of Chemistry and Engineering Physics .................................................................................. 98
Broad Field Science Program .................................................................................................................... 103
Department of Civil and Environmental Engineering ............................................................................. 105
Department of Computer Science and Software Engineering ................................................................. 109
Department of Electrical Engineering ..................................................................................................... 113
Department of General Engineering ....................................................................................................... 116
Department of Mathematics ..................................................................................................................... 119
Department of Mechanical and Industrial Engineering ............................................................................ 122

College of Liberal Arts and Education .................................................................................................... 126
Department of Criminal Justice ................................................................................................................ 128
Ethnic Studies Program ........................................................................................................................... 131
Department of Performing and Visual Arts .............................................................................................. 132
Department of Humanities ........................................................................................................................ 142
Department of Psychology ....................................................................................................................... 152
Department of Social Sciences .................................................................................................................. 155
Women's Studies Program ....................................................................................................................... 168
School of Education ................................................................................................................................. 169

III. Course Descriptions

Accounting ................................................. 183  English ............................................................................ 224  Physical Science ..................................................... 266
Agricultural Industry .......... 184  Engineering Physics ......................................................... 230  Physical Education .................................................. 267
Agricultural Science ........ 186  Ethnic Studies ................................................................. 232  Physics ........................................................................ 272
Art ............................................................. 191  French ............................................................................. 234  Political Science ......................................................... 272
Biology ...................................................... 194  General Engineering .................................................. 235  Psychology ................................................................. 274
Business Administration ... 198  Geography ................................................................. 236  Reclamation ............................................................... 277
Chemistry ............................................. 202  Geology ................................................................. 240  Sociology ................................................................. 278
Civil Engineering ............... 205  German .............................................................................. 241  Software Engineering ............................................ 279
Communication .............................. 209  History ............................................................................ 241  Spanish ........................................................................ 281
  Technologies ................................ 210  Industrial Engineering .............................................. 245  Speech ........................................................................ 282
  Computer Science ...... 213  Industrial Studies ........................................................... 247  Teacher Education .................................................. 283
  Counselor Education ... 215  Mathematics ................................................................. 252  Theater ....................................................................... 288
  Criminal Justice ..... 216  Mechanical Engineering ..................................................... 255  UWP Study ................................................................ 289
  Economics ................. 219  Applied Music .............................................................. 259  Women's Studies ......................................................... 290
  Electrical Engineering .. 221  Music .............................................................................. 259
  Energy ......................... 224  Philosophy ................................................................. 265

IV. Other Reference Information

Faculty and Academic Staff ....................................................................................................................... 292
Faculty Emeriti and Retired Academic Staff ............................................................................................ 306
Chancellor's Cabinet ................................................................................................................................. 308
UW System Administration ....................................................................................................................... 309
Glossary .................................................................................................................................................. 310
Index ...................................................................................................................................................... 313
To Prospective Students

Welcome to the University of Wisconsin-Platteville! The contents of this catalog describe programs and courses offered by UW-Platteville. The contents include information related to course offerings, tuition and fees, financial aid, scholarships, housing and much more.

You may obtain the standard UW System Application for Admission form from your high school counselor (if you attend a Wisconsin high school). You may also contact the UW System HELP office by calling 1.800.442.6459, or you may contact the UW-Platteville Office of Admission and Enrollment Services. We strongly encourage you to apply electronically. Please see the UW-Platteville home page at www.uwplatt.edu/admission/apply.html for specific instructions. In the catalog's Admission section, you will find more detailed information about admission categories, dates and requirements.

Campus Visits

Visiting campus is the best way to experience UWP and find out what the campus, faculty, staff and students have to offer! Group and individual campus visits are available by appointment through the Prospective Student Services office weekdays throughout the school year and Mondays, Tuesdays and Wednesdays throughout the summer. Our visit program provides you with an opportunity to talk with staff from Prospective Student Services, learn more about UWP and take a campus tour. Let us know what academic area you are interested in and if you are planning to be involved in athletics and/or any student organizations and clubs, and we can personalize a visit just for you! Pioneer Preview Open Houses are our eight scheduled group visits and offer a wide range of activities for students and families, including a student services fair, campus tour, lunch and a faculty meeting. Visit www.uwplatt.edu/admission/visits.html to schedule a visit to UWP.

About this Catalog

The UW-Platteville catalog represents the most accurate reflection of curricula and policies available up to the time of printing. All students entering the university follow the guidelines and academic requirements espoused by this document, unless they are interrupted by time away from the institution. Students whose attendance is interrupted for at least one semester may be expected to meet the curricular requirements in effect at the time of their return.

Students follow the requirements of the catalog in effect at the point of admission. Students transferring from another UW institution follow the guidelines in effect at the point of admission to the UW System. This practice could be affected by a variety of situations, such as collegiate or departmental curricular changes, absence for several semesters or terms and other circumstances. Students must decide to choose between the requirements of one catalog or another; they may not choose to combine catalogs.

Individual departments make announcements concerning changes in degree requirements. Students should remain in contact with their advisors to keep informed about their degree requirements and any possible changes that should occur.

Catalogs are issued to new students when they register for courses. Your catalog should be kept readily available throughout your academic career. The contents of the catalog can also be found on the UWP home page.

As a reminder, this bulletin is not a contract, but represents announcements of general information, general academic regulations and the university's academic programs extant at the date of publication. Questions concerning the catalog may be directed to your advisor, departmental offices or the Registrar's Office.

Equal Opportunity/Affirmative Action

The University of Wisconsin-Platteville is an Equal Opportunity/Affirmative Action institution. In compliance with relevant federal and state civil rights legislation, the university does not discriminate on the basis of age, race, creed, color, handicap, sex, sexual orientation, developmental disability, national origin, ancestry, marital status, arrest record or conviction record.

Inquiries related to Equal Opportunity/Affirmative Action issues may be directed to the Office of Affirmative Action/Personnel.

Accreditation

UW-Platteville is accredited by:

- American Chemical Society
- Foundry Education Foundation
- Higher Learning Commission - 312.263.0456 www.ncahighteachers.org
- National Council for the Accreditation of Teacher Education
- National Association for the Education of Young Children
- National Association of Industrial Technology
- National Association of Schools of Music
- Wisconsin Department of Public Instruction

UW-Platteville is a member of:

- American Council on Education
- American Association of Colleges for Teacher Education
- American Association of University Women
- American Association of Higher Education
- Association of State Colleges and Universities
- College Entrance Exam Board
- Council of Higher Education Accreditation
- Council for the Advancement and Support of Education
- Fulbright Association
- International Association of University Presidents
- North Central Association of Colleges and Schools
- Wisconsin Women in Higher Education Leadership
- Wisconsin Association of Collegiate Registrars and Admissions Officers
- Wisconsin Institute for Peace and Conflict
About UW-Platteville

We encourage you to visit our World Wide Web home page at www.uwplatt.edu/

Our Mission

The fundamental mission of UW-Platteville and the entire UW System is to serve the people of Wisconsin. This basic goal is expressed in detail in the mission statement adopted in 1988 and revised in 2002. In those statements, UW-Platteville pledges itself to:

1. Enable each student to become broader in perspective, more literate, intellectually more astute, ethically more sensitive and to participate wisely in society as a competent professional and knowledgeable citizen.
2. Provide baccalaureate degree programs which meet primarily regional needs in arts and sciences, teacher education, business and information technology.
3. Provide baccalaureate degree programs and specialized programs in middle school education, engineering, technology management, agriculture and criminal justice which have been identified as institutional areas of emphasis.
4. Provide graduate programs in areas clearly associated with its special mission.
5. Provide undergraduate distance learning programs in business administration and graduate online programs in project management, criminal justice and engineering.
6. Provide agricultural systems research programs utilizing the Pioneer Farm in partnership with businesses, universities and agencies.
7. Expect scholarly activity, including applied research, scholarship and creative endeavor, that supports its programs at the baccalaureate degree level, its selected graduate programs and its special mission.
8. Seek to serve the needs of all students and in particular the needs of women, minority, disadvantaged and nontraditional students. Furthermore, the University seeks diversification of the student body, faculty and staff.
9. Serve as an educational, cultural and economic development resource to southwestern Wisconsin.

These statements, along with the UW System and University Cluster mission statements, provide a guide to UW-Platteville in what it attempts and does not attempt to accomplish as an institution of higher education.

Faculty and Academic Staff

The first priorities of UW-Platteville's faculty are teaching and advising. Students benefit from direct contact with faculty; all classes are taught by faculty and academic staff members. The student to instructor ratio is approximately 16 to 1. Of a faculty of 336, approximately 90 percent hold doctorates or terminal degrees. A complete listing of our faculty and academic staff can be found in the back of this catalog.

Students

Students attending UW-Platteville are from all parts of Wisconsin, from surrounding states and from other countries. Enrollment for Fall of 2008 was approximately 7,500 students. Nearly 90 percent of students are undergraduates. Some 2,700 students live in 10 campus residence halls. Nearly 80 percent of students are Wisconsin residents, and just over 12 percent are enrolled through the Tri-State Initiative. Students actively participate in the governance process at UW-Platteville. There are incredible opportunities for involvement through membership in the more than 200 student clubs and organizations.

Safety and Health Policy

The University of Wisconsin System is committed to maintaining adequate facilities for a safe and healthy learning environment. The university works with faculty and staff so that they are equipped to educate their students on practices and procedures that ensure compliance with safety laws and regulations in their institutional areas.

Certain courses and research projects require that students work with hazardous materials while engaging in academic studies. Instructors of these courses and research projects must inform and train students on procedures that will maintain the students’ personal health and safety and provide them with information on the hazards of specific chemicals that will be used during their course of study. Furthermore, instructors must enforce and follow safety policies. Prior to use of hazardous materials and equipment, students shall review the procedures and information, and discuss any associated concerns with the instructor.

Facilities

The main campus of the University of Wisconsin-Platteville is located in the southwest quadrant of the City of Platteville. Spanning over 330 acres, the main campus includes over 30 buildings in a park-like setting. Over the last decade, there has been extensive facility development on the campus. New buildings since 1997 include the Children's Center, the Pioneer Student Center, the greenhouse and adjacent gardens, Southwest Hall and Engineering Hall. Additionally, there have been major renovations to Doudna Hall, Russell Hall, Pioneer Tower, Ullrich Hall, the Art Building, Ullsvik Hall and Glenview Commons. There have also been extensive improvements in athletic and recreational facilities, including Ralph E. Davis Pioneer Stadium, the outdoor track and field facility, and the softball and baseball fields.
A significant feature of the University campus is the Center for the Arts. The 565-seat concert hall is known for its excellent acoustics. There is also a 210-flexible seat theater and rehearsal halls in the facility. The center is home to the award-winning Performing Arts Series and the summer Heartland Festival.

Pioneer Farm, located about 5 miles southeast of the City of Platteville, is the university’s 450-acre systems research and education facility. Pioneer Farm features newly constructed buildings, including the Agriculture Technology Center, the Cooper Living and Learning Center, the Swine Center and the Dairy Center. The farm enterprise includes dairy, swine and beef herds plus corn, soybean and alfalfa cropping. Pioneer Farm is a key component of the Wisconsin Agricultural Stewardship Initiative, a statewide collaboration between producers, state government and the University of Wisconsin System to evaluate best management practices in Wisconsin and form policies based on practices that will enhance the environment and produce a profit for the producer. Pioneer Farm has developed to provide agricultural and environmental research in a production setting representative of Southwest Wisconsin and the Upper Mississippi Basin loess hills.

UWP also has facilities which can transmit or receive full motion or compressed video to or from anywhere in the world. One facility, a permanent distance education classroom in Ottensman Hall, is used primarily by the College of Engineering, Mathematics and Science, and another is used within Pioneer Tower by the College of Business, Industry, Life Science and Agriculture. A third facility is at the Pioneer Farm.

The Platteville Community

The Greater Platteville area, with a population approximating 25,000 people, is located in scenic Southwest Wisconsin. Platteville is served by U.S. Highway 151, a 4-lane expressway that connects Cedar Rapids (IA) to Fond du Lac (WI), and State Highways 80 and 81. Platteville is located in Wisconsin's Driftless Area and is surrounded by gently rolling hills and beautiful farm country. The City has an historic Main Street and extensive retail opportunities both downtown and near the east-side expressway exit. Additionally, the City has excellent medical facilities, a bustling industry park and several quickly developing housing areas. Residents and visitors enjoy 16 city parks, which include over 200 acres of open space; the city's art gallery and museums; playgrounds; baseball and softball diamonds; biking and hiking trails; a skate park; picnic shelters; an arboretum; and an outdoor aquatics center.

The city and the university join together to offer local residents events and activities such as the Heartland Festival and Performing Arts Series, Homecoming and the Lighting of the “M.” More information about university events can be found on UWP's home page (www.uwplatt.edu/). Information about places to stay in Platteville can be found at www.uwplatt.edu/contact/lodging.html or by calling the Platteville Area Chamber of Commerce at 608.348.8888.

The University Seal and School Colors

The university seal displays two symbols rooted in the school's beginning. The bell reminds us of the Platteville Normal School where it woke the students each morning, calling them to daily assembly, sounded study hours and signaled the day's end. The bell originates from the Wisconsin Mining School and symbolizes the engineering programs and their roots in the mining industry of the Platteville area.

The school colors represent the two academic disciplines which were the foundation of our university: orange symbolizes engineering, and blue symbolizes education.
Admission to the University

To All Applicants

This section provides general admission information for degree-seeking students. If you are interested in professional development courses, or courses for personal enjoyment, you are directed to the Continuing Education section.

If you intend to earn a degree, you must apply for admission to the University. If you attend a Wisconsin high school, you may obtain the standard UW System Application for Admission form from your high school counselor. You may also obtain an application by calling the UW System HELP office at 1.800.442.6459. We strongly encourage you to apply electronically; please see the UW-Platteville home page at www.uwplatt.edu/admission/apply.html for specific instructions.

Applications for the following fall semester are accepted on September 15. Admitted students (including transfers) are required to submit a $100 enrollment deposit as soon as possible to ensure a place in the incoming class. The deposit is refundable until May 1. There is a January 1 priority application date, so early application is encouraged. Also, we cannot process your application until your application fee is received. If you know what field of study you intend to pursue, we ask that you indicate that choice on the application. If you are still deciding, we request that you indicate that as a choice. Some majors require additional standards for admission to their respective department (for example, persons wishing to major in engineering must have earned a 22 or higher in the mathematics portion of the ACT, or SAT I mathematics score of 520) or have earned a grade of “C” or better in MATH 2640 Calculus and Analytic Geometry or its equivalent. Please check the departmental section in this catalog for details. The staff in the Office of Admission and Enrollment Services is dedicated to assisting you. If you wish to study at an institution closer to your home but wish to transfer eventually to UW-Platteville, all you have to do is contact our office for specific information regarding the transfer process.

Special Notice: All applicants must provide the university with accurate information about personal and educational history. Students who intentionally falsify or omit information, as part of their university record, will be suspended.

Admission Categories

Admission procedures and standards vary somewhat from group to group. The following is a definition of each category. Find the category that applies to you, and then find the subsection which discusses that category for information on what you will need in order to be admitted to UW-Platteville.

Freshmen:

Graduates of high schools in the United States and those who will be graduating. International students who wish to enter as freshmen should refer to the International Student Admission section of this chapter.

Transfer Students:

Applicants who have earned college credit at another university, vocational or technical college as a matriculated student and wish to transfer to UW-Platteville.

Re-entry Students:

Students who have attended UW-Platteville as degree-seeking students in the past and wish to take classes again at the university.

Non-traditional Students:

Students who are defined in the Board of Regents Policy (87-8) Non-Traditional Admission will be considered according to the criteria under the University of Wisconsin-Platteville’s comprehensive review policy.

Special Students:

Students who wish to further their education, but are not immediately seeking a degree from UW-Platteville. In order to be enrolled as a “special” non-degree student, the applicant must complete the special student application located in the Office of the Registrar. Although transcripts are not required, prospective students are required to have graduated from a recognized high school or its equivalent. Students who, after having been a “special” student, wish to seek a degree must complete the admission process for degree-seeking students and matriculate before they have earned 30 semester credits as a “special” student. It is important to note that “special” students may not register for more than six semester credits per semester unless authorized by the Registrar or the Provost. Students in this category are ineligible for financial aid.

High School “Special” Students:

Students currently enrolled in high school who apply to UW-Platteville for concurrent course work. In order to be considered as high school “special,” students must comply with the following:

- Must be in the top 50 percent of their class or have an ACT composite of 22 (SAT I of 1030) as a senior.
- Must be in the upper 10 percent of the class or have scored in the top 10 percent in one or more of the nationally recognized admission examinations (ACT, SAT I) as a junior.
- Must have the sanction of the high school principal or counselor (in writing to the Office of Admission and Enrollment Services).

Each high school student aspiring to attend university classes may take three semester credits per semester. Certain students may elect to take up to, but no more than, six semester credits per semester upon the approval of the Office of Admission and Enrollment Services. It is to be understood that each high school student wishing to attend classes at UW-Platteville must reapply each semester.
Youth Options Program:
High school students who wish to take university courses under the youth option program (YOP) must apply through both their high school and UW-Platteville for permission to enroll. (Contact your high school counselor, principal or district administrator for additional information.)

New Freshman Admission Guidelines
Students meeting the following requirements are likely to be admitted:

- Successfully completed 17 college preparatory units to include:
  - 4 units English
  - 3 units Mathematics (Algebra and higher)
  - 3 units Social Science
  - 3 units Natural Science (two must include lab experiences)
  - 4 units to include courses from the above academic areas, foreign language, fine arts, computer science or courses in vocational areas
- Top 50 percent of graduating class or ACT composite of 22 (1030 SAT). Consideration will also be given to factors such as stronger academic performance later in high school; demonstrated leadership skills in school or community; and personal statements and recommendations.
- Students seeking immediate admission to general engineering must have a minimum mathematics ACT score of 22 or SAT (520). Engineering students not meeting these minimum mathematics requirements will be placed in pre-engineering until completion of Calculus and Analytic Geometry with a letter grade of “C” or higher.
- UW-Platteville uses standardized test results as one of the criteria measures for admission. The UW System requires all new freshmen applicants to submit the results of either the ACT or SAT for review. The ACT is the preferred test.

Students denied or not meeting the admission guidelines may contact the Director of Admission and Enrollment Services for an independent review of all credentials.

Home-Schooled Student Admission Procedures
To be considered for admission, home school students must provide the following:

- Official transcripts from school(s) attended
- Transcript from courses taken at home and grades, signed by the parent providing the education verifying the curriculum
- Official ACT/SAT score reports
- Other information related to the student's education

Note: Admission Policies vary based on the graduation date of applicants; i.e., a student who graduated in 1985 would fall under the admission policies effective for the fall 1985 semester.

Transfer Requirements
How do I apply?
Transfer students must complete a UW System application and submit it to the Office of Admission and Enrollment Services to begin the admission process. Official high school transcripts from high schools of graduation and from ALL colleges or universities previously attended or currently attending are also required. These documents must be sent directly from the high school or Office of the Registrar. You are required to provide the Office of Admission and Enrollment Services with a statement of your activities (work, armed services, etc.) for the period of time you have chosen not to attend a college or university for a semester or more.

What are the transfer requirements for standard admission?
All transfer students may be admitted if they have a cumulative grade point average (CGPA) of 2.00 or higher in college transfer courses and are in good academic standing at the institution they are currently attending or have attended.

These policies are subject to enrollment management concerns, reviewed periodically and may be changed according to the needs of the university. Enrollment will be managed according to the university caps determined by university officials, UW System and the Board of Regent mandates. Further, university enrollment caps may be determined by college/program specific needs and by specific student categories.
Transfer Policies

Student Eligibility

All transfer students may be admitted if they have a cumulative grade point average (CGPA) of 2.00 or higher in college transfer courses and are in good academic standing at the institution they are currently attending or have attended.

Transfer students should remember that even when the university general education requirements are considered met, other college or departmental requirements may not have been met.

Credits may be accepted from all properly accredited four-year and two-year institutions recognized by the Council for Higher Education. Courses that are vocational, technical, remedial or doctrinal in nature are not transferable.

All transfer students should meet with their major advisor as soon as possible. Students who have an earned associate degree from another two year institution or junior college will be individually assessed regarding transfer credits. The maximum number of credits transferable from a two year institution is 72.

When credits are transferred and accepted, they are recorded in terms of UW-Platteville courses. Only credit is recorded: grades and/or grade points are not transferred.

The transfer policy discussed here is subject to enrollment management needs, which are reviewed periodically and may be changed according to the needs of the university.

Transfer from Specific Schools

Students transferring from a UW System institution or an Illinois Community College with an earned associate degree in arts or sciences will have met all university general education requirements.

Students transferring from MATC (Madison) and Nicolet Area Technical College with an earned Associate of Arts or Associate of Science degree granted on or after May 7, 2003, will have met all university general education requirements with the EXCEPTION of the Ethnic and Gender Studies requirement. The two exceptions mean that these requirements will still need to be satisfied by the transfer of specific courses satisfying the Ethnic and Gender Studies areas or by completing the requirements through classes at UW-Platteville.

Students transferring from MATC (Milwaukee) with an earned Associate of Arts (NOT the Associate of Science) degree granted on or after May 7, 2003, will have met all university general education requirements with the EXCEPTION of the Ethnic and Gender Studies requirement.

Students transferring from Northeast Iowa Community College (NICC) with an earned Associate of Arts or an Associate of Science degree granted on or after December 3, 2003, will have met all university general education requirements with the EXCEPTION of the Ethnic and Gender Studies requirement.

Students transferring from Kirkwood Community College (KCC) and Eastern Iowa Community College District (EICCD) with an earned Associate of Arts or an Associate of Science degree granted on or after December 3, 2008 will have met all university general education requirements with the EXCEPTION of the International Education, Natural Sciences and the Ethnic and Gender Studies requirements. With regard to the Natural Sciences, students transferring from KCC and EICCD with an A.A. or A.S. degree must have natural science courses, each with a laboratory, from two different areas of natural science. These courses must be completed either at KCC or EICCD prior to transfer to UW-Platteville or at UW-Platteville after the student transfers. Students from KCC and EICCD will also need to meet the International Education, Ethnic and Gender Studies requirements either by the transfer of courses meeting these requirements or by completing them through classes at UW-Platteville.

If all of the course work was not completed at one of these recognized institutions, credits may not transfer and the associate degree may not satisfy the general education requirements. Articulations with other schools may also exist.

Transfer of Credits

Evaluation of the transfer of your credits will occur only after your file is complete (i.e. when all transcripts, enrollment deposit and other pertinent information has been received by the Office of Admission and Enrollment Services). The cumulative GPA of all schools attended will be calculated by using all courses completed that are transferable to UW-Platteville. Admission will be determined based on your cumulative GPA meeting the minimum admission requirements and on the Enrollment Services policies at the time your file becomes complete.

Credit Evaluation

Once you have been admitted and the enrollment deposit paid (the enrollment deposit will be applied to your tuition costs for your first term), a credit evaluation of general education requirements will be completed and mailed to both you and the college of your major so that it is available for review by your assigned advisor. Your advisor or department chair will determine which courses may be taken in transfer to meet the requirements of your declared major. In the event that you have not declared a major, the advisor for “deciding” students will assist you in determining your course schedule. All students are strongly encouraged to meet with university advisors before transferring to ensure a smooth transition.

Academic Advising

During registration and advising, the college of your major will assign a faculty member to serve as your advisor. Your advisor will have a copy of both your transcript and credit evaluation and will be a resource person for you to plan the courses you will need in order to graduate. In addition, you will receive a UW-Platteville catalog during the registration and advising process; it is an excellent source of information. It is a good idea for YOU to take the responsibility for building your own “plan for graduation.” Successful students work closely with their advisor throughout their college careers.

Advance registration for continuing students takes place in the semester prior to enrollment and the regular registration takes place immediately preceding the first week of classes each semester. Details will be sent to you. Students admitted after advance registration may register on an individual basis. Call the Office of Admission and Enrollment Services for details.
May I pre-register?

Transfer students may register with continuing students only if they have been admitted, the evaluation of previous course work has been completed before the pre-registration date and the enrollment deposit has been paid. Therefore, early application is necessary for pre-registration.

Transfers from Wisconsin Technical College Institutions

The number of credits accepted for transfer from a Wisconsin Technical College is generally limited. It is possible, in some cases, to transfer up to the maximum of 30 credits in general education courses. More credits may be accepted if program-to-program articulation agreements have been approved: check with your institution to see if this applies or call the Office of Admission and Enrollment Services at 1.800.362.5515.

Other Transfer Credits

Transfer credit is accepted for appropriate college level courses completed through extension or correspondence study from accredited colleges or universities. Certain military service school credit may be granted in transfer, based upon recommendations by the American Council on Education.

UW Colleges/UW-Platteville Guaranteed Transfer Program

Students participating in the UW Colleges/UW-Platteville Guaranteed Transfer Program may begin their university education at a UW College and, if they meet the requirements listed below, will be guaranteed admission to UW-Platteville upon completion of 60 credits. Some majors and programs make exceptions for the required number of credits: be sure to check with the department or program for which early transfer is recommended.

To be eligible for the Guaranteed Transfer Program, students must:

1. Have matriculated as a new freshman at a University of Wisconsin College.
2. Submit a “Declaration of Intention” to participate in the Guaranteed Transfer Program prior to the start of the sophomore year (30 credits) in the UW Colleges.
3. Complete the minimum number of credits required within three years of the time of matriculation at the UW Colleges. Complete and submit to UW-Platteville a UW System Application for Admission. Students must submit this application in accordance with the deadlines and enrollment procedures imposed for all transfer students and should note on the application their participation in the Guaranteed Transfer Program.
4. Maintain a minimum 2.00 cumulative grade point average and a 2.00 in the term prior to transfer.

UW College students participating in the Guaranteed Transfer Program must also meet the same criteria (e.g. GPA, course requirements) for admission to specific programs as continuing UW-Platteville students. The guarantee of admission applies only to the institution, not to the specific major or program. Students should consult an academic advisor to determine the required GPA for their intended major or program.

Re-entrant Requirements

- Students who voluntarily interrupt university work while in good standing may be granted admission upon completion and submission of the UW System application to the Office of Admission and Enrollment Services.
- Students granted re-entry status who were on scholastic probation or other conditional status at the same time of last attendance at UW-Platteville retain such status as a condition of re-entry unless attendance at another recognized institution has altered the status.
- Eligibility for re-admission is based upon previous work at UW-Platteville; however, to be re-admitted to the university, each student must be eligible to return to the institution last attended. Students desiring re-admission, after having been declared ineligible to continue for scholastic or other reasons, may file an appeal with the Admission and Academic Appeals Committee.
- The initial appeals process is through the Admission and Academic Appeals Committee.
- All re-entrant students must pay a $100 enrollment deposit prior to credit evaluation and registration.

International Student Admission Policies

International undergraduate students receive a warm welcome at UW-Platteville. In admitting international students, the Admission Office considers factors such as scholastic achievement, English language proficiency and evidence of sound financial backing through parents, governmental agencies or other sources. It is highly recommended that applications for the fall semester be completed no later than May 1 and that applications for the spring semester be completed no later than September 15.

To be considered for admission to UW-Platteville, international students must provide the following:

- International student application, including non-refundable application fee
- Academic records, confirming secondary and/or university education, mailed directly from the school attended to the Admission Office. Academic records must be in the original language with a certified English translation and should include the dates of attendance, level of study, list of subjects, school leaving marks/grades earned, grading system used and record of certificate, diploma, degree earned
- Evidence of proficiency in English: 500 (paper based) or 173 (computer based) or 61 (Internet) minimum on TOEFL or 5.5 minimum on the IELTS submitted directly from the testing agency to the Admission Office
- Affidavit of financial support, documenting ability to meet all financial obligations for duration of study at UWP, signed by parent, sponsor or governmental agency.

International students who have completed university credit at institutions outside of the USA must, at their own expense, submit their records for a “catalog match” evaluation to Educational Credential Evaluators, Inc. (www.ece.org) prior to enrolling in classes at UWP.

Special Note for international transfer students: International students currently studying in the USA who seek to transfer to UWP must provide a Transfer Clearance Form, completed by the Designated School Official at their current school. International students transferring from USA colleges or universities may...
demonstrate competence in English through courses taken at such institutions when grades of “B” or higher have been earned in English composition courses and speech. The International Student Transfer Clearance form can be found online at www.uwplatt.edu/intprog/international/files/transferClearance.pdf.

Tri-State Initiative

UWP is assisting the Tri-State region to develop its workforce. The Tri-State Initiative (TSI) has increased the number of students from the neighboring states of Illinois and Iowa attending and graduating from UW-Platteville. TSI is assisting new and continuing Wisconsin and Tri-State businesses in addressing critical workforce needs.

The Initiative has had a transforming effect on the campus and the community. The initiative features competitive pricing with other tri-state institutions when annual tuition, fees, room, board and books are included. Tuition monies from the students who enroll as a part of the initiative remain at UWP, paying for increased faculty and staff, program development and academic buildings.

Learn more about the Tri-State Initiative by visiting www.uwplatt.edu/admission/tristate.
Credits by Examination or Review

Some students may be eligible to receive college credits based on their Advanced Placement (AP) or College Level Examination Programs (CLEP) scores; still others may choose to take test-outs developed by individual departments on the UWP campus. In addition, most veterans are eligible to receive some advanced credit for their service.

Since many of the credits awarded by examination or review count toward the general education requirements, students should read both this chapter and the general education chapter of the catalog thoroughly before registering for courses.

Advanced Placement and Credit (Revised: January 1, 2007)

<table>
<thead>
<tr>
<th>AP Examination</th>
<th>Score</th>
<th>UWP Credit</th>
<th>Course No.</th>
<th>UWP Course Name</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of Art</td>
<td>3,4,5</td>
<td>3</td>
<td>ART 2430</td>
<td>Art Survey</td>
<td></td>
</tr>
<tr>
<td>Drawing Portfolio</td>
<td>3,4,5</td>
<td>4</td>
<td>ART 1010</td>
<td>Basic Drawing I</td>
<td></td>
</tr>
<tr>
<td>2-D Design Portfolio</td>
<td>3,4,5</td>
<td>2</td>
<td>ART 1420</td>
<td>Basic Design I: 2-D</td>
<td></td>
</tr>
<tr>
<td>3-D Design Portfolio</td>
<td>3,4,5</td>
<td>2</td>
<td>ART 1520</td>
<td>Basic Design II: 3-D</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>3</td>
<td>BIOLOGY 1150</td>
<td>General Biology</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>4</td>
<td>BIOLOGY 1150</td>
<td>General Biology</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>5</td>
<td>5</td>
<td>BIOLOGY 1150</td>
<td>General Biology</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>3</td>
<td>5</td>
<td>CHEMISTRY 1050</td>
<td>General Chemistry</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>4</td>
<td>4-5</td>
<td>CHEMISTRY 1140 or CHEMISTRY 1450</td>
<td>General Chemistry</td>
<td>Chemistry for Engineers</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>5-8</td>
<td>CHEMISTRY 1140 and 1240 or CHEMISTRY 1450</td>
<td>General Chemistry</td>
<td>Chemistry for Engineers</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>3,4,5</td>
<td>3</td>
<td>COMPUTER 1430</td>
<td>Programming in C++</td>
<td></td>
</tr>
<tr>
<td>Computer Science A</td>
<td>3,4,5</td>
<td>3</td>
<td>COMPUTER 1430</td>
<td>Programming in C++</td>
<td></td>
</tr>
<tr>
<td>Pascal-based A or AB</td>
<td>3</td>
<td>3</td>
<td>COMPUTER 1130</td>
<td>Intro to Programming</td>
<td></td>
</tr>
<tr>
<td>C++-based A or AB</td>
<td>3</td>
<td>3</td>
<td>COMPUTER 1430</td>
<td>Programming in C++</td>
<td></td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>3,4,5</td>
<td>3</td>
<td>ECONOMICS 2130</td>
<td>Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>Microeconomics</td>
<td>3,4,5</td>
<td>3</td>
<td>ECONOMICS 2230</td>
<td>Microeconomics</td>
<td></td>
</tr>
<tr>
<td>English Language and Comp.</td>
<td>3,4</td>
<td>3</td>
<td>ENGLISH 1130</td>
<td>Freshman Composition</td>
<td></td>
</tr>
<tr>
<td>English Language and Comp.</td>
<td>5</td>
<td>6</td>
<td>ENGLISH 1130</td>
<td>Freshman Composition</td>
<td>ENGLISH 1230</td>
</tr>
<tr>
<td>Literature and Composition</td>
<td>3</td>
<td>3</td>
<td>ENGLISH 1130</td>
<td>Intro to Literature</td>
<td></td>
</tr>
<tr>
<td>Literature and Composition</td>
<td>4,5</td>
<td>6</td>
<td>ENGLISH 1130 and ENGLISH 1330</td>
<td>Freshman Composition</td>
<td>Intro to Literature</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>3,4,5</td>
<td>3</td>
<td>GEOGRAPHY 3330</td>
<td>Environ. Conservation</td>
<td></td>
</tr>
<tr>
<td>AP Examination</td>
<td>Score</td>
<td>UWP Credit</td>
<td>Course No.</td>
<td>UWP Course Name</td>
<td>Comments</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------</td>
<td>------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>FRENCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French Language</td>
<td>3</td>
<td>8</td>
<td>FRENCH 1040</td>
<td></td>
<td>Elementary French</td>
</tr>
<tr>
<td>French Language</td>
<td>4</td>
<td>12</td>
<td>FRENCH 1040</td>
<td></td>
<td>Elementary French</td>
</tr>
<tr>
<td>French Language</td>
<td>5</td>
<td>16</td>
<td>FRENCH 1040</td>
<td></td>
<td>Intermediate French</td>
</tr>
<tr>
<td>French Literature</td>
<td>4</td>
<td>8</td>
<td>FRENCH 1040</td>
<td></td>
<td>Elementary French</td>
</tr>
<tr>
<td>French Literature</td>
<td>4</td>
<td>12</td>
<td>FRENCH 1040</td>
<td></td>
<td>Elementary French</td>
</tr>
<tr>
<td>French Literature</td>
<td>5</td>
<td>16</td>
<td>FRENCH 1040</td>
<td></td>
<td>Intermediate French</td>
</tr>
<tr>
<td><strong>GERMAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German Language</td>
<td>3</td>
<td>8</td>
<td>GERMAN 1240</td>
<td></td>
<td>Elementary German</td>
</tr>
<tr>
<td>German Language</td>
<td>4</td>
<td>12</td>
<td>GERMAN 1240</td>
<td></td>
<td>Elementary German</td>
</tr>
<tr>
<td>German Language</td>
<td>5</td>
<td>16</td>
<td>GERMAN 1240</td>
<td></td>
<td>Intermediate German</td>
</tr>
<tr>
<td><strong>ITALIAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>3,4,5</td>
<td>3</td>
<td></td>
<td></td>
<td>General Education - Humanities</td>
</tr>
<tr>
<td><strong>LATIN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin (Vergil) and (Catullus-Horace)</td>
<td>3,4,5</td>
<td>3</td>
<td></td>
<td></td>
<td>General Education - Humanities</td>
</tr>
<tr>
<td><strong>SPANISH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish Language</td>
<td>3</td>
<td>8</td>
<td>SPANISH 1840</td>
<td></td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>4</td>
<td>12</td>
<td>SPANISH 1840</td>
<td></td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>5</td>
<td>16</td>
<td>SPANISH 1840</td>
<td></td>
<td>Intermediate Spanish</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>3</td>
<td>8</td>
<td>SPANISH 1840</td>
<td></td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>4</td>
<td>12</td>
<td>SPANISH 1840</td>
<td></td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>5</td>
<td>16</td>
<td>SPANISH 1840</td>
<td></td>
<td>Intermediate Spanish</td>
</tr>
<tr>
<td>AP Examination</td>
<td>Score</td>
<td>UWP Credit</td>
<td>Course No.</td>
<td>UWP Course Name</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
<td>------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>CHINESE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese Language and Culture</td>
<td>3,4,5</td>
<td>6</td>
<td></td>
<td></td>
<td>General Education - meets Foreign Language requirement and 3 credits toward Humanities</td>
</tr>
<tr>
<td><strong>JAPANESE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>3,4,5</td>
<td>6</td>
<td></td>
<td></td>
<td>General Education - meets Foreign Language requirement and 3 credits toward Humanities</td>
</tr>
<tr>
<td><strong>GEOGRAPHY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Geography</td>
<td>3,4,5</td>
<td>3</td>
<td>GEOGRAPHY 1230</td>
<td></td>
<td>Survey of Cultural Geog</td>
</tr>
<tr>
<td><strong>HISTORY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American History</td>
<td>3,4,5</td>
<td>6</td>
<td>HISTORY 1330</td>
<td></td>
<td>Hist. of U.S., 1492-1877</td>
</tr>
<tr>
<td>European History</td>
<td>3,4,5</td>
<td>3</td>
<td>HISTORY 1020</td>
<td></td>
<td>World Civilization II</td>
</tr>
<tr>
<td>World History</td>
<td>3,4,5</td>
<td>6</td>
<td>HISTORY 1010</td>
<td></td>
<td>World Civilization I</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HISTORY 1020</td>
<td></td>
<td>World Civilization II</td>
</tr>
<tr>
<td><strong>MATHMATICS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus AB</td>
<td>3</td>
<td>3</td>
<td>MATH 2630</td>
<td></td>
<td>Calculus w/ Applications</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>4,5</td>
<td>4</td>
<td>MATH 2640</td>
<td></td>
<td>Calculus and Analytic Geometry I</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>0,1,2</td>
<td>3</td>
<td>MATH 2630</td>
<td></td>
<td>Calculus w/ Applications</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>0,1,2</td>
<td>4</td>
<td>MATH 2640</td>
<td></td>
<td>Calculus and Analytic Geometry I</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3</td>
<td>4</td>
<td>MATH 2640</td>
<td></td>
<td>Calculus and Analytic Geometry I</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>4,5</td>
<td>8</td>
<td>MATH 2640</td>
<td></td>
<td>Cal and Analytic Geom I</td>
</tr>
<tr>
<td>Statistics</td>
<td>3,4,5</td>
<td>3</td>
<td>MATH 1830</td>
<td></td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td><strong>MUSIC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Theory</td>
<td>3,4,5</td>
<td>3</td>
<td>MUSIC 1730</td>
<td></td>
<td>Theory and Musicianship with Computers</td>
</tr>
<tr>
<td>Music Listening and Literature</td>
<td>3,4,5</td>
<td>3</td>
<td>MUSIC 2030</td>
<td></td>
<td>Intro to Music History and Literature</td>
</tr>
<tr>
<td><strong>PHYSICS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics B</td>
<td>3,4,5</td>
<td>10</td>
<td>PHYSICS 1350 PHYSICS 1450</td>
<td></td>
<td>Introductory Physics</td>
</tr>
<tr>
<td>Physics C: Mechanics</td>
<td>3,4,5</td>
<td>4</td>
<td>PHYSICS 2240</td>
<td></td>
<td>General Physics I</td>
</tr>
<tr>
<td>Physics C: Electricity and Magnetism</td>
<td>3,4,5</td>
<td>4</td>
<td>PHYSICS 2340</td>
<td></td>
<td>General Physics II</td>
</tr>
<tr>
<td><strong>POLITICAL SCIENCE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Government and Politics</td>
<td>3,4,5</td>
<td>3</td>
<td>POLISCI 1230</td>
<td></td>
<td>Intro to American Government</td>
</tr>
<tr>
<td>Comparative Government and Politics</td>
<td>3,4,5</td>
<td>3</td>
<td>POLISCI 2430</td>
<td></td>
<td>Comparative Politics</td>
</tr>
<tr>
<td><strong>PSYCHOLOGY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>3,4,5</td>
<td>3</td>
<td>PSYCHLGY 1130</td>
<td></td>
<td>General Psychology</td>
</tr>
</tbody>
</table>
The College Level Examination Programs (CLEP) provide subject examinations and scores necessary for credit. More detailed information on individual tests may be obtained from the ACES office 608.342.1033.

### COMPOSITION AND LITERATURE

<table>
<thead>
<tr>
<th>CLEP Examination</th>
<th>Min. Score</th>
<th>UWP Credits</th>
<th>Course No.</th>
<th>UWP Course Name</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Literature</td>
<td>50</td>
<td>6</td>
<td>ENGLISH 2430</td>
<td>American Lit through the Civil War</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENGLISH 2530</td>
<td>American Literature since the Civil War</td>
<td></td>
</tr>
<tr>
<td>Analyzing and Interpreting</td>
<td>50</td>
<td>6</td>
<td>ENGLISH 1330</td>
<td>Intro to Literature</td>
<td></td>
</tr>
<tr>
<td>Literature</td>
<td></td>
<td></td>
<td>ENGLISH 1390</td>
<td>Special Topics: Literary</td>
<td></td>
</tr>
<tr>
<td>Freshmen College Composition</td>
<td>50</td>
<td>6</td>
<td>ENGLISH 1130</td>
<td>Freshman Composition I</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENGLISH 1230</td>
<td>Freshmen Composition II</td>
<td></td>
</tr>
<tr>
<td>English Literature</td>
<td>50</td>
<td>6</td>
<td>ENGLISH 2130</td>
<td>English Lit: Beg thru Commonwealth</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENGLISH 2230</td>
<td>English Lit: Rest thru Romantic Age</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>50</td>
<td>6</td>
<td>ENGLISH 1330</td>
<td>Intro to Literature Special Topics: Writing or Literature</td>
<td>General exam: Must be taken prior to earning 15 credits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENGLISH 3990</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### FOREIGN LANGUAGES

<table>
<thead>
<tr>
<th>CLEP Examination</th>
<th>Min. Score</th>
<th>UWP Credits</th>
<th>Course No.</th>
<th>UWP Course Name</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>French-College Level 1</td>
<td>50</td>
<td>4</td>
<td>FRENCH 1040</td>
<td>Elementary French I</td>
<td></td>
</tr>
<tr>
<td>French-College Level 2</td>
<td>59</td>
<td>12</td>
<td>FRENCH 1140</td>
<td>Elementary French II</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FRENCH 2040</td>
<td>Intermediate French I</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FRENCH 2140</td>
<td>Intermediate French II</td>
<td></td>
</tr>
<tr>
<td>German-College Level 1</td>
<td>50</td>
<td>4</td>
<td>GERMAN 1240</td>
<td>Elementary German I</td>
<td></td>
</tr>
<tr>
<td>German-College Level 2</td>
<td>60</td>
<td>12</td>
<td>GERMAN 1340</td>
<td>Elementary German II</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GERMAN 2240</td>
<td>Intermediate German I</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GERMAN 2340</td>
<td>Intermediate German II</td>
<td></td>
</tr>
<tr>
<td>Spanish-College Level 1</td>
<td>50</td>
<td>4</td>
<td>SPANISH 1840</td>
<td>Elementary Spanish I</td>
<td></td>
</tr>
<tr>
<td>Spanish-College Level 2</td>
<td>63</td>
<td>12</td>
<td>SPANISH 1940</td>
<td>Elementary Spanish II</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SPANISH 2840</td>
<td>Intermediate Spanish I</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SPANISH 2940</td>
<td>Intermediate Spanish II</td>
<td></td>
</tr>
</tbody>
</table>

### SOCIAL SCIENCE AND HISTORY

<table>
<thead>
<tr>
<th>CLEP Examination</th>
<th>Min. Score</th>
<th>UWP Credits</th>
<th>Course No.</th>
<th>UWP Course Name</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>3</td>
<td>POLISCI 1230</td>
<td>Introduction to American Government</td>
<td></td>
</tr>
<tr>
<td>Educational Psychology, Introduction to</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
<td>No credit granted</td>
</tr>
<tr>
<td>Hist of U.S. I: Early Colonizations to 1877</td>
<td>50</td>
<td>3</td>
<td>HISTORY 1330</td>
<td>History of U.S., 1492-1877</td>
<td></td>
</tr>
<tr>
<td>Hist of U.S. II: 1865 to the Present</td>
<td>50</td>
<td>3</td>
<td>HISTORY 1430</td>
<td>History of U.S., 1865 to Present</td>
<td></td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>50</td>
<td>2</td>
<td>TEACHING 2130</td>
<td>Human Growth and Development</td>
<td></td>
</tr>
<tr>
<td>Macroeconomics, Principles of</td>
<td>50</td>
<td>3</td>
<td>ECONOMIC 2130</td>
<td>Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>Microeconomics, Principles of</td>
<td>50</td>
<td>3</td>
<td>ECONOMIC 2230</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>Psychology, Introductory</td>
<td>50</td>
<td>3</td>
<td>PSYCHLGY 1130</td>
<td>General Psychology</td>
<td></td>
</tr>
<tr>
<td>Social Sciences and History</td>
<td>50</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
<td>No credit granted</td>
</tr>
<tr>
<td>Sociology, Introductory</td>
<td>50</td>
<td>3</td>
<td>SOCIOLGY 1030</td>
<td>Principles of Sociology</td>
<td></td>
</tr>
<tr>
<td>Western Civ I: Ancient Near East to 1648</td>
<td>50</td>
<td>3</td>
<td>HISTORY 1030</td>
<td>World Civilization I</td>
<td></td>
</tr>
<tr>
<td>Western Civ II: 1648 to Present</td>
<td>50</td>
<td>3</td>
<td>HISTORY 1020</td>
<td>World Civilization II</td>
<td></td>
</tr>
</tbody>
</table>
**Departmental Test-Outs and Waivers**

UW-Platteville offers numerous internally developed assessment methods for awarding credit. Department examinations or test-outs, and department waivers are the most common forms of establishing proficiency. While students may attempt to test out of many introductory courses, they should remember that test-outs are not offered for every course, or by every department.

Students having extensive training or significant practical experience may apply to the appropriate department chair for permission to begin the test-out process. Individual departments administer and begin the test-out process, evaluate tests for credit in a variety of ways and may charge for the evaluation. The following guidelines have been established regarding departmental evaluations:

1. Only students enrolled at UW-Platteville may participate in departmental test-out examinations.
2. Credit for such examinations with the appropriate departmental approval shall be entered on the student’s permanent scholastic record.
3. Credit examinations, once failed, may not be repeated.
4. No student may take a credit examination in a course which is a prerequisite, stated or implied, for an advanced course in the same subject for which credit has already been earned.
5. The maximum credit which may be earned by examination in any one field is determined by the academic department in which the test-out was taken.
6. A fee may be charged for administering examinations to students wishing to receive credit by examination. The fee may vary by program area and by student status (full-time or part-time).

---

**Advanced Credit for Veterans**

Veterans who have served in the regular armed forces for more than one year will be allowed two credits in physical education. Veterans of two years’ service which included an overseas assignment may be allowed additional general elective credits. Credit may be allowed for specific courses in appropriate curricula recommended by the American Council on Education in A Guide to the Evaluation of Educational Experiences in the Armed Services. Additional information is available from the Veterans Affairs coordinator in the Registrar's Office.
Registering For and Taking Courses

This section provides an overview of UWP registration policies. More details and specific dates for registration and fee payment are available. Specific courses offered each term are available in the online class offerings. Students not on campus may view the list of upcoming course offerings on the Registrar’s home page (www.uwplatt.edu/registrar/).

Advance Registration and Orientation for New Freshmen

Registration for new freshmen takes place on the UW-Platteville campus during the summer. Parents are strongly encouraged to become involved also. Because we recognize that the usual procedure of placing a new student into a hectic fall registration can be unsettling and a bit bewildering, we offer our freshmen a slower-paced summer registration.

We at UW-Platteville want you to be successful as a student. For this very basic reason, we have established a special registration program for you and your parents. Each registration session is specifically designed to provide you with a solid foundation concerning the needs of students and parents. Remember, the more you know, the better chance of success you will have in making a smooth transition from your current setting to student life at UW-Platteville. The bottom line is that we want you and your parents to take full advantage of these registration events.

We strongly encourage incoming freshmen to take part in the new student orientations which take place every semester just before the beginning of classes. These special activities provide all new students with an opportunity to become acquainted with and to feel part of UW-Platteville’s campus and the local community. The activities are both social and informative. They include tours of the campus, assistance with class scheduling and picking up textbooks, visits with college deans and faculty, small group discussions and at least one all-student social event which brings together newcomers and returning students.

Registration for Continuing and Transfer Students

Continuing and transfer students should check with the Registrar’s Office or review this information at www.uwplatt.edu/registrar/.

Each student must meet with an assigned academic advisor before registering. Students may also wish to visit the department chair of their major, to see what general education, major or minor requirements they have left to meet. Advising reports are available to students and advisors before advance registration begins. Students must meet with an advisor to fill out a worksheet listing their desired course schedule and receive a personal identification number (PIN).

Students are assigned an advance registration appointment based upon the number of credits earned: those with the most credits earned (seniors) register first, followed by juniors, sophomores and freshmen. Courses fill on a first-come basis; therefore, students are encouraged to take advantage of advance registration.

Students who miss advance registration may still register during regular or late registration. Dates for these registration periods are also listed on the Registrar’s home page (www.uwplatt.edu/registrar/).

Policies Affecting Student Registration

Course Numbering

Students should look at a course’s number to determine the general difficulty level of the course and whether it will count towards their degree:

- 0000-0990 No credit toward graduation
- 1000-2990 Credit - lower level undergraduate
- 3000-4990 Credit - upper level undergraduate
- 5000-7990 Graduate level

Academic Load

Students who enroll for 12 or more credits during a semester are classified as full-time students; students who enroll for 11 or fewer credits are classified as part-time students. The normal load for full-time students is 15-16 credits per semester, but students on academic probation may carry no more than 14 credits without special permission. To remain eligible for scholarships and financial aid, students must remain classified full-time.

Students in good standing except those with less than a 2.00 GPA, who wish to enroll for an overload of more than 18 credits or students on academic probation who wish to enroll for more than 14 credits must obtain permission from their advisor. A student carrying credit in extension or by correspondence, either with this or another university, must include these credits in computing total load. The registrar as an ex-officio member of the Admission and Academic Appeals Committee has been delegated the responsibility for granting permission for overloads and exceptions to established standards. Appeals may be made to the committee or the associate vice chancellor.

In granting permission for overloads, the committee normally follows these guidelines:

<table>
<thead>
<tr>
<th>Cumulative GPA</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2.00 (on academic probation)</td>
<td>14</td>
</tr>
<tr>
<td>Less than 2.00 (in good standing)</td>
<td>15</td>
</tr>
<tr>
<td>2.00-2.74</td>
<td>18</td>
</tr>
<tr>
<td>2.75-3.24</td>
<td>19</td>
</tr>
<tr>
<td>3.25-3.74</td>
<td>20</td>
</tr>
<tr>
<td>3.75-4.00</td>
<td>22</td>
</tr>
</tbody>
</table>

No credit will be given for unapproved overloads. Students who enroll for an overload without the permission of the registrar will be required to drop sufficient courses and/or credits to comply with the prescribed load limit. If a student refuses to drop courses as prescribed, the registrar and the associate vice chancellor will select the courses to be removed from the record.
Taking Courses Pass-Fail

Students who desire to take courses on a pass-fail basis must apply at a time and place specified by the registrar at the beginning of each semester. Some courses are offered only on a pass-fail basis. Courses taken on a pass-fail basis cannot be used to fulfill general requirements or major requirements. Students may enroll for only one course per semester on a pass-fail basis.

Course Changes

All course changes must be cleared officially with the registrar; otherwise, grades of "F" will be recorded. Normally students are not permitted to add courses after the fifth day of classes of any term.

Repeat Courses

When students repeat courses, only the most recent grade is counted in calculating the grade point average. The most recent grade is used regardless of whether it is higher or lower than the previous grade. If the repeat results in the grade of "F" and the student had previously earned a grade higher than "F," the "F" replaces the grade in the calculation of the grade point average, and the student loses the credits since no credits are granted when a grade of "F" is earned. A course that has a number change needs a repeat card submitted to the Registrar's Office. Co-ops, internships and independent study courses need a repeat card. Courses coded as repeatable in the online catalog also need a repeat card filed with the Registrar's Office.

Auditing Courses

A grade of satisfactory must be earned in any course audited in order to have such audit appear on the student's transcript. If the grade is unsatisfactory, the audited course shall not appear on the transcript. Audit cards must be filed at the Registrar's Office during the first week of classes.

Tuition and Fee Policies

This section provides the tuition and fee policies that were in effect at the time this book went to press. For up-to-date information, contact the Cashier's Office at 608.342.1211 or check the Cashier's Office website: www.uwplatt.edu/business/cashiers.

The act of registering for courses at UW-Platteville creates a financial obligation to pay the tuition and fees associated with those courses according to the tuition and fees schedule established annually by the University of Wisconsin System Board of Regents. The payment due dates are provided with the initial billing. Payment of all charges is the responsibility of the student. It is the responsibility of the student to pursue money from financial aid, scholarships, loans or other non-personal sources. These are not considered payments until the money is received and posted to the student's account. Students who fail to cancel their registration or withdraw from courses in compliance with university policies and procedures will be charged even if they do not attend class. Non-attendance does not constitute withdrawal.

Payment Policy

UW-Platteville bills all students for each semester approximately two weeks prior to the beginning of the semester. Financial aid, scholarships and educational loans will not be reflected on the bill. The initial payment is due approximately five days after the beginning of each semester. To avoid finance charges, accounts must be paid in full by the due date on the initial bill.

A partial payment is available for fall and spring semesters to students with a good credit history. (There is no partial payment plan available for summer school and winterim.) In order to qualify for the partial payment plan, a copy of the Installment Credit Agreement form must be on file in the Cashier's Office. A new Installment Credit Agreement form is required for each semester. Students with a demonstrated poor payment history may be denied access to the partial payment plan. The partial payment plan consists of an initial payment of 33 1/3 percent of all charges billed on the initial bill, due approximately five days after the beginning of each semester and two additional installments of 33 1/3 percent due approximately the fifth and ninth week of each semester. Exact due dates are provided with each initial billing statement. A finance charge of 1 percent per month on the unpaid balance (annual percentage rate of 12 percent) will be assessed on any balance remaining after the initial billing due date. Registered students who do not receive a bill should contact the Cashier's Office. Failure to receive a bill will not excuse students from payment deadlines.

Payment in full of all tuition and fees prior to the initial billing due date will avoid finance charges. (This date is also provided with each initial billing statement.) Unpaid balances incur finance charges as detailed in the Installment Credit Agreement. Registration for future semesters will not be permitted unless the account balance is zero. Accounts in default will be forwarded for private collection action. Students will be responsible for all collection costs on amounts not paid when due including but not limited to attorney fees and collection agency fees.

If your bill will be paid by a third party (i.e. VA, DVR, Youth Options), a written authorization from the third party must be provided to the Cashier's Office before the initial billing due date, or the account will be considered delinquent. The authorization must include who will be paying, the amount they will be paying, the name and ID number of the student they are paying for and when the payment will be made.

Payments are posted to the student's account as of the date of receipt. Post-dated checks will be returned to the sender and do not qualify as payment. All checks should be made payable to UW-Platteville and should include the student's ID number. The payment must be in the Cashier's Office on or before the due date to avoid service charges. UW-Platteville charges $20 for all checks returned by the bank for any reason.
Excess Credit Policy

Effective fall 2004, Wisconsin resident undergraduate students who have earned 165 credits (or 30 credits more than required for their degree programs, whichever is greater) are charged a surcharge, equal to 100 percent of the regular resident tuition, on credits beyond that level.

This policy, created by the Board of Regents, views a college degree from the perspective of a taxpayer. There are many legitimate reasons why students might accumulate “excessive” credits. This new policy will not prevent students from pursuing their goals, but it will be at a cost that is less subsidized by Wisconsin taxpayers. This is not a policy that UWP can decide whether or not to implement. This is a mandate.

The policy covers all Wisconsin resident undergraduate students pursuing their first bachelor’s degree, including students pursuing a double major. Minnesota residents and non-residents, graduate, post-baccalaureate, non-degree and special students are not affected.

The policy applies to credits earned at UW System campuses and WTCS (Wisconsin Technical College System) transfer credits accepted toward a degree. Retroactive, AP, military and other college transfer credits do not count toward the total.

The surcharge will be applied to students in the semester following the one in which they reach the earned credit limit. The limit is 165 credits or 30 credits more than required for a degree program, whichever is greater.

The policy became effective in fall 2004, and it applies to all Wisconsin resident students enrolled who meet the above criteria. It is not phased in.

The surcharge adds 100 percent to the Wisconsin resident tuition routinely charged, and it is charged for all credits over the credit limit.

A message will appear on students’ advising reports when they reach 130 earned credits. Each semester, the Registrar’s Office will notify students who have reached a predetermined number of earned credits that they are accumulating credits at a rate that might result in them being charged the surcharge. Students will have the opportunity to discuss the issue with the University Registrar. Each term, students who have earned 165 credits, or 30 credits more than required for their programs, will have an opportunity to appeal to the Admission and Academic Appeal’s Committee. In reality, the additional tuition will be charged to very few students.

Late Fee (Administrative Assessment Fee)

Students who have not paid at least 33 1/3 percent of their total initial bill by the initial billing due date of the fall and spring semester will be assessed a $30 late fee. A $15 late fee will be assessed if 100 percent of the summer charges are not paid by the end of the regular summer session or the first day of winterim classes.

Who Gets the Bill?

All initial bills go to the student’s home address. All other bills go to the student’s local address. If the student wants the bill to go to another address, a Change of Billing Address form must be submitted to the Cashier’s Office.

Refund Policy

Tuition and fees may be refunded upon official withdrawal from the university according to the current refund schedule provided all official withdrawal forms are completed. The current refund schedule is:

- 100 percent during the first two weeks of classes
- 50 percent during the third and fourth weeks of classes
- 0 percent thereafter

Room and board charges for students who voluntarily withdraw from the university may be adjusted in accordance with the meal and board contracts. Further information about these contracts is available from the Meal Access Office at 608.342.1404 or the Housing Office at 608.342.1845.

If a student receives any type of federal financial aid (including Stafford loans and/or PLUS loans) and they withdraw from the university or reduce their credit load, their financial aid eligibility will be re-calculated and a percentage of the aid may be considered unearned and may have to be returned to the funding source. Please contact the Financial Aid Office at 608.342.1836 if you have any questions about this policy.

For any other billing questions, visit the Cashier’s Office website (www.uwplatt.edu/business/cashiers/), call 608.342.1211 or e-mail cashieroff@uwplatt.edu.

Dropping Courses

Students may drop a course prior to its beginning or at the drop-add session at the start of each semester without the instructor’s signature.

Students who drop a course after the tenth instructional day of the term will be charged a drop fee of $15 per course. Drop fees must be paid before the form is submitted to the Registrar.

If a student registered in a course drops that course in the first two weeks of class in that semester, that course shall not appear on the student’s grade list for that semester and hence will not be recorded on the student’s transcript.

If a student registered in a course drops that course any time after the second week of class, but prior to the end of the eighth week of classes, a notation of withdrawn will appear on the student’s grade list and hence on the student’s transcript.

Students may drop a course through the eighth week of the current semester. Students who do not drop a course by the end of the eighth week must either complete the course satisfactorily or receive the grade “F.” Late drops (beyond the eighth week) will be permitted only in extraordinary circumstances and only with the consent of the instructor and the dean of the college. In order to be allowed a late drop, students must provide a written explanation satisfying the instructor and the dean as to the special circumstances which prevented the student from dropping the course prior to the end of the eighth week. Students receiving educational entitlement from the Veterans Administration must report to the VA if they fail or withdraw from all courses after mid-term when enrolled in two or more unit subjects.
Seniors Enrolled in Graduate Courses

Seniors are eligible to take graduate courses numbered 5000-6990 for graduate credit, if:

1. they are in their last semester as an undergraduate;
2. they are eligible for admission to the graduate program in full standing;
3. their undergraduate grade point average is 2.75 or higher;
4. they limit their total credit loads to a maximum of 15 credits including graduate courses, and a majority of the credits are for undergraduate courses; and
5. they secure the approval of the dean of the School of Graduate Studies.

Courses taken for graduate credit will not be used to fulfill requirements for the baccalaureate degree.

Anyone taking graduate courses will be charged graduate fees for those courses. Anyone taking undergraduate courses will be charged undergraduate fees for those courses. Graduate classes do not count toward the undergraduate plateau (12-18 credits), and undergraduate classes do not count toward the graduate plateau (9-12 credits).
Class Attendance

At UW-Platteville we take class attendance very seriously, for education in our view is much more than a matter of tests, readings, examinations and papers. Through lectures and discussions, the subject of a particular course is investigated in depth and explored in its many ramifications; through interaction in the classroom (and outside of it) the many aspects of a given course come together and are synthesized into a coherent whole. Such an educational experience demands reciprocal commitments from faculty to students and from students to faculty.

The administration and the faculty assume students will attend classes regularly, and teachers are expected to keep records of attendance in their classes. Those instructors who set limits on unexcused absences will inform students of their absence policies in writing and orally at the beginning of the semester. Students are responsible for all work missed through unexcused absence. Instructors are not obligated to seek out or counsel students concerning absenteeism or to allow such students any special consideration.

When students wish to participate in field trips or other extracurricular or cocurricular activities, prior approval must be obtained from the instructors of classes that will be missed. Students should contact the instructors when they return to classes, and of course, they are expected to make up any missed work.

A student who is absent from class should notify instructors as soon as possible (either by phone, e-mail or in person). Notifying instructors and arranging make-up work is the responsibility of the student. If contact with instructors cannot be made directly, the student should call the academic department involved. This information is available in your Campus Directory.

If your absence is medical related and you have been receiving treatment from the Student Health Services, they may be able to be of assistance to you. They can be reached at 608.342.1891.

In serious situations where the student is incapacitated and temporarily unable to contact instructors, family members may contact the Office of Assistant Chancellor for Student Affairs at 608.342.1854 for assistance with these matters. The Office of Student Affairs would then provide notification (not verification) of the absence to the instructors involved. However, arrangements for make-up work, make-up exams, etc. are the responsibility of the student.

Note: Neither Student Health Services nor the Office of Student Affairs provides excuses for absences from class.

Other University Policies

You must follow the rules, regulations and academic requirements of both the university and the college in which you enroll as described in the catalog of initial enrollment. At a later time, however, you may elect to follow the rules, regulations, and academic requirements specified in subsequent catalogs. If your progress toward a degree is interrupted by withdrawing from the university and you re-enroll at a later date, you must abide by the catalog in effect at the time you re-enroll.

Grades

The grade point average (GPA) is determined by dividing the total number of grade points earned by the total number of credits attempted at UW-Platteville.

Sometimes it is appropriate, because of student illness or other unusual circumstances, to give a grade of Incomplete (I). After a student receives an Incomplete (I), it is the student's responsibility to complete all work and assignments necessary to complete the class requirements prior to the ninth week of the ensuing semester. Unless a grade of Incomplete is changed to some other grade before the end of the ninth week of the ensuing semester, the Incomplete is changed to an “F.”

Grading mistakes should be rectified before the end of the ninth week of the ensuing semester. It is the student's responsibility to call the instructor's attention to any error in grading as soon as possible after grades are reported. It is the instructor's responsibility to correct grading errors.

When students repeat courses, only the most recent grade is counted in calculating the grade point average. The most recent grade is used regardless of whether it is higher or lower than the previous grade. If the repeat results in the grade of “F” and the student had previously earned a grade higher than “F,” the “F” replaces the grade in the calculation of the grade point average, and the student loses the credits since no credits are granted when a grade of “F” is earned. A course that has a number change needs a repeat card submitted to the Registrar's Office. Co-ops, internships and independent study courses need a repeat card. Courses coded as repeatable in the online catalog also need a repeat card filed with the Registrar's Office.

Failing grades and deficiencies in grade point averages may be removed only by taking work in residence at UW-Platteville.

Scholastic Honors

The word “honors” has two different meanings at UW-Platteville. On the one hand, it refers to scholastic honors, which is the recognition given by the university to students who have achieved high grade point averages. On the other hand, it refers to a specific honors program open only to outstanding students. This section discusses general scholastic honors only; the honors program is discussed under "Special Academic Programs.”

Recognition for scholastic honors may be given at various times during a student’s academic program by inclusion on the Chancellor's and Dean's Honor Rolls.
To qualify for Chancellor’s or Dean’s Honors, students must complete at least 12 credits during the semester and meet the following grade point average requirements:

<table>
<thead>
<tr>
<th>Program</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chancellor’s Honors</td>
<td>4.00</td>
</tr>
<tr>
<td>Dean’s Honors, by college:</td>
<td></td>
</tr>
<tr>
<td>Business, Industry, Life Science, and Agriculture</td>
<td>3.75</td>
</tr>
<tr>
<td>Engineering, Mathematics and Science</td>
<td>3.50</td>
</tr>
<tr>
<td>Liberal Arts and Education</td>
<td>3.75</td>
</tr>
</tbody>
</table>

At commencement, students who have earned 48 or more credits at UW-Platteville and have earned high cumulative grade point averages during their undergraduate years, graduate in two categories: honors (3.50-3.74), and high honors (3.75-4.00) with the designations of magna cum laude (honors) and summa cum laude (high honors).

**Declarer/Changing Majors**

**Declaring a Major**

Students may declare an intended major immediately upon entering the university, or remain undecided. In either case, they will be assigned an advisor. When students choose a major, they should report to the Registrar’s Office to receive instructions and complete a change of major form (on which they change from “deciding” to a specific major). They will then be assigned a new advisor in their declared field of study.

**Changing Majors**

Students wishing to change majors and/or colleges should contact the Registrar’s Office for complete instructions and a change of major form. Upon changing majors, students will be assigned a new academic advisor and encouraged to request a major checksheet showing the new requirements they must fulfill. Students who change majors and wish to have their record adjusted under academic bankruptcy guidelines should read the following section.

**Academic Bankruptcy**

Students who transfer from one major to another at UW-Platteville may be granted the option to have their prior academic record adjusted as follows if they have a grade point average of 2.00 or higher.

1. Credits in courses in which a grade of “D” or higher was earned will be counted toward graduation but not necessarily toward a major or minor.
2. All previous work shall remain on the official record, but the grades will not be used to calculate the cumulative grade point average. The grade point average will be calculated on the basis of grades earned after declaration of academic bankruptcy.
3. This option may be used only once in a student’s career.
4. In order to graduate after electing this option, a student must complete at least 32 credits and earn a 2.00 grade point average.

Note: Students who have less than 2.00 may also qualify, but the credits in which a “D” was earned will not count toward graduation.

Students who wish to file academic bankruptcy must do so within one semester of the change of major. Students who declare academic bankruptcy are not eligible to pursue their previous major without express permission from the dean of that college, and the student’s cumulative grade point average will be re-calculated. Students should contact the Registrar’s Office for specific instructions.

**Double Majors**

The student will normally meet graduation requirements for a degree in one of the major curricula. It is permissible for a student to be granted a bachelor’s degree with two majors if the complete requirements of both major curricula are satisfied at the same time.

No more than one diploma or degree will be granted to the same student at one commencement. In the event that a student has completed the requirements for two different degrees, such as a B.A. and a B.S., the student will be required to choose which degree is to be recognized during the commencement ceremony. Both degrees will be posted to student transcripts upon completion. A graduation fee will be assessed for each diploma/degree.

**Transcripts**

An official transcript of a student’s educational record may be obtained by submitting a signed request to the Office of the Registrar. The following fees apply:

- Normal service (1-2 business days): $7.00 per transcript
- Same day/rush service: $10.00 per transcript
- Faxed service: $15.00 per fax number

Fax service includes rush processing of an unofficial transcript delivered to a designated fax number and an official copy of the facsimile sent in the mail. Official transcripts may not be faxed.

Only students may request their transcripts, except as prescribed in the Family Educational Rights and Privacy Act. Further information, including a transcript request form, may be found on the Registrar website at: www.uwplatt.edu/registrar.

**Simultaneous Enrollment at Another Institution**

All off-campus courses offered by other accredited colleges and universities will be accepted by UW-Platteville provided a grade of “C” or higher is earned and they are approved by the department housing the major. UW-Platteville does not offer correspondence courses, but UW-Extension does. Permission must be obtained from the registrar prior to registering for correspondence work.

Students enrolling in off-campus or correspondence courses are responsible for making certain such courses meet the requirements of the curriculum in which they are enrolled. In case of doubt, students should contact the registrar, academic advisor or the chairperson of the department in which they intend to major.
**Academic Probation and Suspension**

Students whose academic records do not meet the minimum achievement standards of the university are placed on academic probation or suspension.

The minimum acceptable standards for retention are as follows:

1. First semester students (new freshmen only)
   - Grade point average (GPA) less than 1.60: First Probation
   - GPA less than 0.75: Dismissal

2. Second semester students
   - Cumulative GPA less than 1.80: First Probation if in good standing the previous semester
   - Final Probation - if on first probation the previous semester
   - Semester GPA less than 1.00: Dismissal

3. Third semester students
   - Cumulative GPA less than 1.80:
     - First Probation - if in good standing the previous semester
     - Final Probation - if on first probation the previous semester
     - Dismissal - if on final probation the previous semester
   - Semester GPA less than 1.00: Dismissal

4. Fourth (and up) semester students
   - Cumulative GPA less than 2.00:
     - First Probation - if in good standing the previous semester
     - Final Probation - if on first probation the previous semester
     - Dismissal - if on final probation the previous semester
   - Semester GPA less than 1.00: Dismissal

Students on final probation will not be allowed more than two consecutive semesters to regain acceptable academic standing. If during the probationary period, students do not meet the minimum acceptable standards defined above, they will be dismissed.

The Veterans Administration (VA) requires that students receiving educational entitlement from the VA must be reported to the VA if they continue in school for a second probationary semester. Educational entitlement may be terminated by the VA until such students have been counseled by VA personnel.

**Suspension for One Semester:**

Students are suspended (dismissed) from the university for one semester under the following conditions.

1. First semester freshmen achieving grade point averages of 0.74 or lower at the end of the semester.

2. Any other student earning a semester grade point average of 0.99 or lower at the end of a semester.

3. Second semester freshmen and first semester sophomores on final probation who earn cumulative grade point averages of 1.79 or lower at the end of a semester.

All other students on final probation who earn a semester grade point average of 2.00 or higher and have a cumulative grade point average of 1.99 or lower at the end of a semester will remain on final probation.

**Suspension for Two Years:**

Students who have been suspended (dismissed), readmitted or reinstated, and again fail to earn the required grade point average, are not eligible to apply for readmission until a period of two years has elapsed.

The Veterans Administration (VA) requires that students receiving educational entitlement from the VA must be reported to the VA if they continue in school for a second probationary semester. Educational entitlement may be terminated by the VA until such students have been counseled by VA personnel.

**Reinstatement to Good Standing:**

Students achieving cumulative grade point averages of 2.00 or higher are reinstated to good standing.

Students are, of course, expected to make diligent progress in the pursuit of a degree. The standards outlined in the Financial Aid section of this bulletin are the stipulated guidelines for satisfactory academic progress for UW-Platteville students.

**Family Educational Rights and Privacy Act**

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include: 1) The right to inspect and review the student’s education records; 2) the right to request the amendment of the student’s education records; 3) the right to provide written consent before the University discloses personally identifiable information from the student’s education records, except to the extent that FERPA authorizes disclosure without consent; and 4) the right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-5901.

UW-Platteville school officials with a legitimate educational need to know may access a student’s education records without consent. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the University. A school official is a person employed by the University in an administrative, supervisory, academic, research or support staff position.

Examples of situations where education records may be disclosed without the student’s written consent include but are not limited to:

1. Requests for “directory information” and the student has not restricted its release.

2. Requests in accordance with a lawful subpoena or court order.

3. Requests from representatives of agencies or organizations from which the student has received financial assistance.

4. Requests from officials of other educational institutions in which the student intends to enroll.

5. Requests from other persons specifically exempted from the prior consent requirement by the act (e.g. certain federal and state officials, organizations conducting studies on behalf of the university, accrediting organizations).
6. Requests in connection with a health or safety emergency as determined by the University.

Directory information may be released to any inquirer unless the student chooses to exercise their right to withhold information. The university publishes a student directory which includes students’ names, local addresses and telephone numbers, home addresses and telephone numbers, and university assigned e-mail addresses. The online University Phonebook includes student’s names, addresses, telephone numbers and majors. For questions about withholding directory information, please contact the Registrar at 608.342.1321.

Further information regarding FERPA, including a current list of what information the University has designated as “directory information,” may be found online under Campus Resources: www.uwplatt.edu/atoz/f.html (Family Educational Rights and Privacy Act).

Student Grievances and Discipline

In any community, including that of scholars and professors, differences of opinion and misunderstandings arise, and provisions must be made for resolution of grievances.

Concerning any decision, there is, with few exceptions, a higher authority to whom appeal may be made should the individual feel that the decision is unjust. The route to follow in seeking redress of a grievance will depend upon the type of grievance and the area of the university concerned. This section will discuss a few of those authorities.

Admission and Academic Appeals Committee

Students with admission, readmission or reinstatement difficulties may appeal in writing to the Admission and Academic Appeals Committee. If the written appeal is denied, personal appeals may be made by appointment through the Registrar’s Office. The committee will study the case and advise the director of Admission and Enrollment Services, registrar or provost as to the proper solutions.

Students with grievances about grades may appeal, in writing, to the Admission and Academic Appeals Committee after first having tried to resolve the issue by conferences with the instructor, department chairperson or college dean. The committee will hear both sides of the issue, examine the records and advise the provost and all parties concerned as to a recommended disposition.

Student Discipline

The assistant chancellor for student affairs (as delegated to the Dean of Students) handles matters involving students’ rights and responsibilities. The assistant chancellor’s responsibility regarding discipline is twofold: assuring that students are treated fairly, and seeing that students meet university policies and regulations. The assistant chancellor is guided in this responsibility by Chapters 17 and 18 of the Wisconsin Administrative Code and by those regulations specific to UW-Platteville. For details see “Policies Governing Student Life” by going to www.uwplatt.edu, clicking on campus resources A-Z, selecting letter “P,” then selecting “Policies Governing Student Life.”

The university may discipline a student for academic dishonesty, including any of the following or similar examples of false representation of a student’s performance: cheating on an examination; collaborating with others on work to be presented unless specifically allowed by the instructor; plagiarizing, including submitting the work of others as one’s own (whether purchased, borrowed or otherwise obtained); stealing examinations; falsifying records or data; submitting work previously presented in another course, unless specifically allowed by the instructor; or participating in an arrangement whereby work, classroom activity or an examination is done by another person.

Discipline Committee and Appeal Tribunal

Instances of student misconduct may be adjudicated through the Office of the Assistant Chancellor for Student Affairs (as delegated to the Dean of Students) or through the Student Faculty Discipline Committee described in the Student Handbook. In addition, students may appeal decisions rendered by the Student Faculty Discipline Committee to an Appeal Tribunal. The Appeal Tribunal recommends to the chancellor its decision on the appeal.

Withdrawal from the University

Withdrawal from the university refers to a complete withdrawal from the university, including withdrawal from all classes for the term. This procedure is not to be confused with dropping a single course or several courses (see the explanation for “Dropping Courses”).

Students may withdraw from the university through the published deadline (the eighth week of a fall or spring semester). A late withdrawal from the university may be requested through the last day of classes but prior to final exams. A late withdrawal from the university is permitted once during the student’s academic career. Any subsequent requests for a complete withdrawal from the university made after the published deadlines must be approved by a special faculty committee.

Students considering withdrawal from the university are encouraged to consult with a staff member at Counseling Services. To be official, any withdrawal from the university must be cleared with the Registrar’s Office, Counseling Services, student’s academic advisor, Student Housing Office, Financial Aid Office, Karrmann Library, Textbook Center and Cashier’s Office. All fees and assessments must be paid on all books returned to the library before an official clearance to withdraw can be given. Specific directions concerning complete withdrawal from the university may be obtained by contacting the Registrar’s Office.

If a student is prevented from a timely withdrawal from the university because of accident, injury, major physical or mental health problems, military duty or other extraordinary circumstances, an extraordinary withdrawal from the university may be permitted. Please consult with the Dean of Students regarding procedures and be prepared to provide documentation to justify the request.

Requirements for the Associate’s Degree

Students may apply for and be granted an Associate’s Degree from UW-Platteville providing they have:

1. A minimum of 60 credits.
2. Fulfilled all general education requirements.
3. A cumulative grade point average of at least 2.00.
4. Have earned at least 24 of the 60 credits at UWP.

Contact the Registrar’s Office for specific details.
Requirements for the Bachelor's Degree

First Bachelor's Degree
In order to graduate with bachelor of arts or bachelor of science degrees, students must earn a minimum of 120 college or university credits (some programs require more than 120 credits), and they must (a) satisfy all the requirements for the particular university degree and for the college in which they are enrolled, (b) satisfy all requirements for a major and (c) earn a minimum of 39 credits in upper division courses (courses numbered 3000 or above). NOTE: Students with majors in the College of Engineering, Mathematics and Science must earn a minimum of 40 credits in upper division courses. All students are expected to earn cumulative grade point averages of at least 2.00 in all subjects and within a major field, but must meet any higher minimum academic standards set for particular majors, minors or colleges. All students must earn 32 credits in residence at UW-Platteville and also 23 of their last 32 credits in residence. Of course, students will not be granted a degree until they have met all their financial obligations to UW-Platteville.

Second Bachelor's Degree
According to the University Undergraduate Curriculum Commission, April 8, 1987:
1. Students with a baccalaureate degree from the University of Wisconsin-Platteville who wish to earn a second major from UW-Platteville may accomplish this by doing the following:
   a. Complete the requirements for the new major not already satisfied
   b. Satisfy other college and institutional graduation requirements for the new major.
All general education requirements are satisfied by the first baccalaureate degree.
A separate diploma will be awarded only when the new major leads to a degree different from the first degree granted. Fulfillment of requirements for a second major of the same degree type will not lead to a second degree, but rather credit for a second major will be entered on the recipient’s transcript.
2. Students with a baccalaureate degree from any other accredited institution who wish to earn a second and distinct degree from UW-Platteville must fulfill the following requirements:
   a. Complete the departmental requirements for the new major not already satisfied.
   b. Satisfy current college and institutional graduation and residency requirements for the new major.
All general education requirements are satisfied by the first baccalaureate degree.
Please see the section entitled Excess Credit Policy regarding questions.

Graduation
Students approaching completion of their program should:
1. Report to the Registrar’s Office at the beginning of their senior year.
2. Complete and file an “Intent to Graduate” card with the Registrar’s Office at that time.
3. Review with their major advisor(s), all course work, credits earned and possible waivers or changes to their degree.
4. Inform the Registrar’s Office of any degree changes, substitutions or waivers.
5. Prepare for Commencement (attendance is strongly encouraged) by ordering a cap/gown and arranging personal and other details.
6. Students are required to pay a graduation fee.

The Registrar’s Office will produce a final evaluation of a student’s credits when the “Intent to Graduate” card is submitted. This evaluation will formally review all credits taken, transferred or substituted/waived and detail which course work remains or has not yet been taken. From this evaluation, students will recognize which credits or courses are to be completed in their last term of attendance. Cautious advising is very important during the senior year. Students who still have degree requirements that are not completed within 60 days following the end of the semester they intend to graduate will be removed from the graduation list. A new Intent to Graduate card must be filed for a future semester.

Commencements are held twice each year - at the end of the fall and spring semesters. All course work (including co-ops, internships and student teaching) must be completed before a degree will be awarded, and attendance at a Commencement ceremony is permitted. Candidates for graduation at the end of a summer session must inform the registrar if they wish to attend the May or December Commencement. Although attendance is optional, we strongly encourage all graduates and their families to attend this important ceremony and celebrate the achievements of our new graduates.
Financial Aid

The Office of Financial Aid assists students with state and federal financial aid programs. Office personnel also provide budget and loan indebtedness counseling and help students find employment on and off campus. They also administer the UW-Platteville Foundation Scholarship Program.

Financial Aid Programs

Three basic categories of financial aid are administered through the UW-Platteville Office of Financial Aid. To be considered for these programs, students must be degree seeking and enrolled for at least six credits. In some cases, students may be eligible for a Pell Grant if enrolled less than half-time. Students enrolled as “special” are not eligible for any of these programs except regular student employment.

To apply for the programs listed below, students must complete the Free Application for Federal Student Aid (FAFSA). This application is available at high school counselor offices, at the UW-Platteville Office of Financial Aid, or students can apply online at www.fafsa.ed.gov.

Students should complete the application and mail it to the federal processing center by March 15. (This is the UW-Platteville priority filing date but not a deadline.)

Grants

These aid programs do not require repayment:

• Federal Pell Grant
• Federal Supplemental Educational Opportunity Grant
• Academic Competitiveness Grant
• SMART Grant
• Wisconsin Higher Education Grant (Wisconsin residents)
• Talent Incentive Program Grant (Wisconsin residents)
• Lawton Undergraduate Minority Retention Grant (Wisconsin residents)
• Advanced Opportunity Grant (Graduate students who are Wisconsin residents)

Loans

These low interest educational loans require repayment, but interest and principal for most loans are deferred until after graduation:

• Federal Perkins Loan
• Federal Stafford Loan
• Federal Unsubsidized Stafford Loan (not need based and interest is not deferred)
• Graduate PLUS Loan (Graduate Students Only)
• Federal Plus Loan (a loan for parents to take out for dependent students, not need based and repayment begins within 60 days of disbursement)*

Campus Employment

Students may work on campus to help with expenses.

• Work Study Program
• “Regular” Student Payroll (not need based)*
* FAFSA is not required

Satisfactory Academic Progress

Students must maintain satisfactory academic progress to continue to receive financial assistance. A minimum number of credits must be completed in relationship to the number of full-time semesters attended. The number of credits required per semester is as follows:

<table>
<thead>
<tr>
<th>Undergraduate Semesters Credits</th>
<th>Graduate Semesters Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 8 credits</td>
<td>1 4 credits</td>
</tr>
<tr>
<td>2 16 credits</td>
<td>2 10 credits</td>
</tr>
<tr>
<td>3 25 credits</td>
<td>3 16 credits</td>
</tr>
<tr>
<td>4 34 credits</td>
<td>4 23 credits</td>
</tr>
<tr>
<td>5 45 credits</td>
<td>5 30 credits</td>
</tr>
</tbody>
</table>

University Refund Policy

For students who withdraw from the university in Fall or Spring semesters, the following refund policy is applied for tuition and fees:

100% 1st week of classes
100% 2nd week of classes
50% 3rd week of classes
50% 4th week of classes

Refund for tuition and fees is based on the full semester cost. Students who live in the residence hall and/or are on a meal plan shall be refunded room and board paid in advance on a weekly pro-rata basis.

Return of Unearned Financial Aid

If you withdraw from the University prior to completing 60 percent of the semester and had received financial aid (grants and/or student loans), you may have to return a portion of your federal financial aid. The amount of aid you may keep when you withdraw is in direct proportion to the length of time you remained enrolled during the semester.
Unofficial Withdrawal

Students who received federal financial aid and receive all “F’s” for non-attendance are considered unofficially withdrawn for the semester. The Financial Aid Office will determine the student’s last date of attendance and the return of unearned financial aid formula will apply (see above). If the last date of attendance cannot be determined, the student is assumed to have attended 50 percent of the semester.

Scholarships

Each year the UW-Platteville Scholarship Program awards over $450,000 in scholarships. The goal of the scholarship program is to provide awards to as many students as possible.

Scholarships are awarded on academic achievement, community involvement, extracurricular activities, an autobiographical essay and a letter of recommendation. Some scholarships require that a student prove financial need. If a student receives a scholarship, it will be considered a resource, and this may affect the amount of other aid the student receives. The specific eligibility criteria are generally listed with each scholarship.

The program is divided into two distinct programs: one for incoming first year students and one for continuing students. The application process is different for each program.

New Freshman Scholarship Program

Students who apply and are accepted for admission at UW-Platteville are eligible to apply for scholarships provided through the UW-Platteville Foundation. Only admitted students will receive scholarship information. To ensure getting the scholarship information, a student should apply for admission by November 15 of the year prior to attendance. The scholarship information will be mailed to the student after they are admitted. The completed scholarship applications must be submitted by mid-January. Committees will meet to make the selections, and students will be notified as soon as possible, generally in March. To be a recipient a student must be enrolled as a full-time student, taking 12 or more credits. The amount and number of scholarships are subject to change and vary from year to year.

Continuing Student Scholarship Program

Scholarships are available to continuing students at UW-Platteville. Transfer students may apply, but scholarships are limited. Scholarship applications should be submitted by February 15 for the scholarships to be awarded for the next academic year. A listing of scholarships can be viewed on the Financial Aid webpage.

Other Scholarships

Information regarding other scholarships resources, not related to the UW-Platteville Foundation, is available in the Financial Aid Office. Applications for these national, regional or major-specific scholarships are usually available.
UW-Platteville's educational philosophy is rooted in four ideas: first, that students are capable of and responsible for making choices; second, that the quality of choice is largely dependent upon the nature and extent of their experience; third, that experience becomes more meaningful and constructive when it is informed by knowledge; and fourth, that while students need certain kinds of knowledge to practice their professions, they need other kinds of knowledge to become well-rounded and fulfilled.

The development of these latter kinds of knowledge is the essential purpose of a liberal arts education. Such an education empowers people to live thoughtful lives, frees them from ignorance and awakens them to a universe much larger than their immediate environment and about a public realm that reaches far beyond their professional circle, local community or nation. More specifically, this central part of education promotes the ability to think and communicate coherently, critically and creatively about:

- the thoughts and actions of people from one's own culture, as well as from different cultures;
- the processes of nature, both animate and inanimate;
- the interrelations among people and between nature and humankind; and
- the possibilities for each person to enhance or detract from the goodness and beauty of life.

This philosophy of education is compatible with the opening statement of the Select Mission in which the University of Wisconsin-Platteville pledges itself to: enable each student to become broader in perspective, more literate, intellectually more astute, ethically more sensitive, and to participate wisely in society as a competent professional and a knowledgeable citizen.

What follows describes the university's plan for meeting this mission. It contains statements of UW-Platteville's general education standards and requirements, together with a complete listing of the courses that students can take. Note that, in addition to these requirements, major programs may require additional courses from the list of general education courses.

**Competencies**

At UW-Platteville, the competencies are comprised of the basic skills: (1) English Composition, (2) Foreign Language, (3) Mathematics, (4) Speech and (5) Wellness/Physical Activity. The design of the basic competency program assumes that high school graduates have met the minimum standards of the university. Opportunities for testing out of certain basic requirements for the baccalaureate degree will exist. Students with exceptionally strong high school backgrounds may earn general education credit by CLEP (College Level Examination Program) or AP (Advanced Placement) testing. Entering students who do not meet minimum standards on the UW System English and Mathematics Placement Tests may be required to take remedial courses in these areas, and such courses will not count toward general education or graduation requirements.

**English Composition**

Students should be able to write and read effectively. A course meeting competency requirements in English composition is designed to enable students to:

- understand written language, including various stylistic devices;
- recognize the importance context has for meaning;
- conceptualize a topic in order to establish a purpose for writing, while keeping in mind the intended reader;
- arrange ideas logically and present them coherently;
- create content that reflects the analysis and synthesis of ideas;
- shape their writing imaginatively.

**Foreign Language**

Students should be able to use a language other than English. A course meeting competency requirements in a foreign language is designed to enable students to:

- obtain basic skills in speaking, writing, listening and reading in a language other than English;
- obtain cultural knowledge related to that language.

**Mathematics**

Students should have a basic competency in computational skills and quantitative perception. A course meeting competency requirements in mathematics is designed to enable students to:

- develop problem solving skills using the methods of mathematics;
- use the recognition of patterns to solve problems;
- work with fundamental notions of number and space;
- distinguish between valid and invalid reasoning; and
- remain alert to the plausibility of solutions.

**Speech**

Students should be able to understand spoken English and communicate using it effectively. A course meeting competency requirements in speaking and listening is designed to enable students to:

- understand the processes of human communication;
- access and organize information logically;
- design and deliver speeches effectively; and
- develop critical listening and reasoning skills.

**Wellness and Physical Activity**

Students should learn how to achieve and maintain both their physical and mental well being. A course meeting competency requirements in wellness is designed to enable students to:

- assess their own overall fitness level; and
- understand what lifestyle changes are required to improve overall fitness.

A course meeting competency requirements in physical activity is designed to enable students to:
• develop an appreciation for, and basic skills in, an activity which if pursued will promote a lifetime of fitness and enjoyment.

Liberal Arts Areas

Providing our students with a well-rounded, liberal arts education and fostering a passion for lifelong learning are at the core of UW-Platteville’s general education program.

Among other things, an educated person:

• is sensitive to the social realities and moral challenges of our time;
• knows what it means to be human and what the human condition is;
• understands his or her culture in a global context;
• comprehends the forces and influences of the past - the judgments, visions and actions of those who have gone before us and have helped shape the present;
• understands human behavior and social existence;
• is able to think creatively and understand experience in imaginative ways;
• understands the character, structure and dynamics of the universe in which we live.

Accordingly, the liberal arts areas (Ethnic Studies, Fine Arts, Gender Studies, Historical Perspective, Humanities, International Education, Natural Sciences and Social Sciences) challenge students to explore the diverse range of disciplines necessary for acquiring the qualities of an educated person. Each area plays a significant role in enabling intelligence to mature and promotes the development of clear, coherent, critical and creative thinking.

All liberal arts courses should include:

• the use of writing to learn course material;
• a challenge to critical thinking;
• the gathering and analysis of information;
• consideration of ethnic, gender and international issues when germane;
• a variety of ways of evaluating student learning, so that such evaluation does not rely alone on objective tests.

Furthermore, they must:

• meet the goals and student learning outcomes identified below that are specific to their area.

Except for courses that count for international education, ethnic studies and gender studies, a course may not fulfill more than one liberal arts requirement.

No more than six credits from a discipline may be counted towards fulfilling these requirements.

Ethnic Studies

The purpose of ethnic studies is to awaken the minds and spirits of students to the issues of race and ethnicity in the United States and the social realities and moral challenges of racism in U.S. culture. It strives to help students fulfill their intellectual, moral and social potential, and encourages them to remove barriers that can prevent others from achieving their own potential. Through their study of ethnic studies, students will:

• explore the history, culture, customs, values, lifestyles and contributions of populations of color in the United States;
• investigate the social and political structures that support racism;
• recognize the influence that students’ own culture and experiences have on their attitudes towards people of color;
• understand multiple viewpoints regarding ethics and justice;
• examine the scholarship that depicts, analyzes and articulates opposition to racism.

Fine Arts

The purpose of the study of fine arts is to help students become familiar with the historical and cultural heritage of the fine arts. They should also gain a basic understanding of the creative processes, forms and concepts used in the arts. Through their study of the fine arts, students will:

• demonstrate knowledge of the history and heritage of the fine arts;
• develop a greater appreciation for the fine arts and their value and relevance in our daily lives;
• demonstrate consideration of a variety of artistic patterns in thought and expression.

Gender Studies

The purpose of gender studies is to help students come to a better understanding of themselves as responsible individuals operating within a gendered cultural context, paying special attention to perspectives involving women. A course that meets liberal arts requirements in gender studies will enable students to engage in personal reflection and explore implications of:

• the cultural constructs that create and perpetuate gender-based stereotypes and unequal power relationships;
• the contributions of diverse populations of women and persons of varied sexual orientations in transforming knowledge;
• the influence that students’ gender and experiences have on their attitudes toward others.

Historical Perspective

The purpose of the study of history is to challenge students to understand and assess our past, in order to form a clearer perception of the present and to deal more effectively with public issues. A course meeting liberal arts requirements in historical perspective is designed to enable students to:

• demonstrate knowledge of the past;
• explore the multitude of circumstances and events that have helped to shape historical judgments, actions and visions;
• interpret the sources of historical change in a variety of contexts.

Humanities

The purpose of the study of humanities is to explore the range of human thought and experience - achievements and failures, joys and sorrows, comedy and tragedy, life and death. It should challenge students to understand and evaluate how others, past and present, historical and fictional, have struggled with these issues. Through their study of humanities, students will:

• understand some of the diverse approaches to questions of human meaning and value;
• demonstrate competence in critical thinking, reading and writing;
• acquire tools for lifelong learning in the humanities.
International Education

The purpose of international education is to challenge students to understand our place within the world and to provide basic knowledge about cultures, people or nations beyond the borders of the United States. A course meeting liberal arts requirements in international education is designed to enable students to:

• investigate the patterns of world interactions;
• examine contemporary ideologies, cultures, places or political and economic systems found throughout the world;
• become open to the challenges and ambiguities of human plurality.

Natural Sciences

The purpose of studying the natural sciences is to help students understand nature and how the processes of scientific investigation lead to new discoveries. A course meeting liberal arts requirements in natural sciences is designed to enable students to:

• discover the patterns, principles and dynamics of natural phenomena and relate them to issues in their lives as citizens;
• comprehend scientific methodology and its limitations;
• engage in the analysis of natural phenomena.

Social Sciences

The purpose of studying the social sciences is to develop an understanding of social systems, the dynamics of individual and group behavior and the forces that operate in social relationships. Through their study of the social sciences, students will:

• demonstrate knowledge of individual and social behavior;
• display knowledge of the problems and issues within social sciences;
• demonstrate knowledge of the methods used to study these problems and issues.

General Education Credit Requirements

• Total credits for Graduation: 120 credits
• General Education Requirements: 43-58 credits*

* depends upon high school foreign language courses completed, scores on the UW System Mathematics and English Placement Tests, and whether courses selected for international education and ethnic/gender studies also count for other liberal arts requirements.

To simplify the listing of approved general education courses which follows, the competency and liberal arts areas discussed previously will be condensed into the following areas: A, B, C, D and E, where A refers to competency requirements and B, C, D and E to liberal arts requirements.

A. Competency Requirements (13 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1130*</td>
<td>3 credits</td>
</tr>
<tr>
<td>English 1230</td>
<td>3 credits</td>
</tr>
<tr>
<td>Speech 1010, 1250, 2010, 2250 or 3250</td>
<td>2 credits</td>
</tr>
<tr>
<td>(Speech 2250, 3250 not for BILSA majors; Speech 2010 is for Education and BILSA majors only)</td>
<td></td>
</tr>
<tr>
<td>Mathematics 1630 or above**</td>
<td>3 credits</td>
</tr>
<tr>
<td>Wellness (PHYSED) 1000, (WOMSTD) 2430</td>
<td>1 credit</td>
</tr>
<tr>
<td>Physical Activity (PHYSED) 1020 to 1640, (MUSIC) 1820</td>
<td>1 credit</td>
</tr>
<tr>
<td>Foreign Language***</td>
<td>0-8 credits</td>
</tr>
</tbody>
</table>

B. Humanities (HUM), Fine Arts (FA), and Historical Perspective (HP) (12 credits)

Courses must be from areas of humanities, fine arts and historical perspectives.

C. Social Sciences (SS) (9 credits)

Courses must be from areas of agriculture, communication, criminal justice, economics, energy, ethnic studies, geography, political science, psychology, sociology, speech or women’s studies.

D. Natural Sciences (NS) (9 credits)

Courses must be from areas of biology, chemistry, geosciences, physics or physical science. All courses must involve a laboratory experience.

E. International Education (IE)/Ethnic (E) and Gender (G) Studies (EGS) (6-9 credits)****

International Education**** 3 credits
Ethnic and Gender Studies**** 3 or 6 credits

Approved courses are from 24 different disciplines. Please consult The Approved Course Listing which follows.

* Students with high UW System English Placement Test scores will be invited to take the test-out for English 1130.
** Varies depending upon UW System Mathematics Placement Test score.
*** Two years of the same high school language with a minimum of “C” average the second year (two semesters) fulfills this requirement.
**** Courses selected for area E only may double count for credit in areas B, C and D.

The following general rules apply:
1. Only approved courses may be used to fulfill the general education requirements.
2. Except in the case of courses taken to fulfill international education, ethnic studies and gender studies requirements, a course may not fulfill more than one liberal arts (B, C, D or E) requirement. Students must take one 3 credit course counting for both ethnic and gender studies (EGS) or take 6 credits; one 3 credit course counting for ethnic studies (E) and one 3 credit course counting for gender studies (G).

Courses that are listed in the Humanities, Fine Arts, Historical Perspective and Social Science areas which can be used to meet the international education requirement are listed under the area of international education and are also designated with an (IE) in the respective lists. Courses which can be used to meet the ethnic/gender studies requirement are designated with an (EGS) for Ethnic and Gender, (E) for Ethnic only or (G) for Gender only.

3. No more then 6 credits from one discipline may be counted toward the fulfillment of liberal arts requirements in the areas of B, C, D and E.
4. Students majoring in fields in the College of Engineering, Mathematics and Science must earn a minimum of 40 credits in upper-division courses (courses numbered 3000 or above). Students majoring in fields in the College of Business, Industry, Life Science and Agriculture and in the College of Liberal Arts and Education must earn a minimum of 39 credits in upper-division courses.
5. All students must earn 32 credits in residence at UW-Platteville and also 23 of their last 32 credits in residence.

Approved Course Listings

A. Competency Requirements

Competencies (13-21 credits)

The competency requirements are met by taking approved courses in the areas of Communication (English Composition and Speech), Mathematics, Wellness, Physical Activity and Foreign Language.

English Composition (6 credits)

Students' UW System English Placement Test scores determine whether or not they will be invited to take the test-out for English 1130. Except for qualified students who test out of English 1130, students must take each of the courses in the freshman composition sequence:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 1130</td>
<td>Freshman Composition</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 1230</td>
<td>Freshman Composition</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Foreign Language (0-8 credits)

Students who have not maintained a “C” or higher average in a second year (2 semesters) high school foreign language course must complete one of the following groups. Students with one year of high school language may wish to test into the second course of the sequence. Students already fluent in a second language other than French, German or Spanish should consult with the Humanities Department.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRENCH 1040</td>
<td>Elementary French</td>
<td>4 credits</td>
</tr>
<tr>
<td>FRENCH 1140</td>
<td>Elementary French</td>
<td>4 credits</td>
</tr>
<tr>
<td>GERMAN 1240</td>
<td>Elementary German</td>
<td>4 credits</td>
</tr>
<tr>
<td>GERMAN 1340</td>
<td>Elementary German</td>
<td>4 credits</td>
</tr>
<tr>
<td>SPANISH 1840</td>
<td>Elementary Spanish</td>
<td>4 credits</td>
</tr>
<tr>
<td>SPANISH 1940</td>
<td>Elementary Spanish</td>
<td>4 credits</td>
</tr>
</tbody>
</table>

Speech (2 credits)

Students must take or test out of one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPEECH 1010</td>
<td>Public Speaking</td>
<td>2 credits</td>
</tr>
<tr>
<td>SPEECH 1250</td>
<td>Professional Speaking</td>
<td>3 credits</td>
</tr>
<tr>
<td>SPEECH 2010</td>
<td>Speech Communication for Teachers</td>
<td>3 credits</td>
</tr>
<tr>
<td>SPEECH 2250</td>
<td>Communication/Leadership in Small Groups*</td>
<td>3 credits</td>
</tr>
<tr>
<td>SPEECH 3250</td>
<td>Interpersonal Communication*</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

* Does not count toward graduation credits for BILSA majors

Mathematics (3 credits)

The number of mathematics credits required of students will vary with the degree they are completing. UW System Mathematics Placement Test results will establish a student's level of mathematics proficiency, and suggest which course the student should take. The minimum required number of mathematics credits for all degree programs is three credits, at or above MATH 1630. However, a student may be required to take lower level or preparatory/remedial mathematics courses to meet the requisite MATH 1630 or higher mandate. Also, the mathematics requirement will be waived for students who receive credit for MATH 2640 Calculus and Analytic Geometry. Students must meet the mathematics competency requirements before their junior year. Students may consult the Mathematics Department for details concerning test-out credit. Students may select from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1630</td>
<td>Finite Mathematics with Applications</td>
<td>3 credits</td>
</tr>
<tr>
<td>MATH 1730</td>
<td>Mathematics of Finance</td>
<td>3 credits</td>
</tr>
<tr>
<td>MATH 1830</td>
<td>Elementary Statistics</td>
<td>3 credits</td>
</tr>
<tr>
<td>MATH 2030</td>
<td>Mathematics for Educators II</td>
<td>3 credits</td>
</tr>
<tr>
<td>MATH 2450</td>
<td>Precalculus</td>
<td>5 credits</td>
</tr>
<tr>
<td>MATH 2530</td>
<td>Trigonometry and Analytic Geometry</td>
<td>3 credits</td>
</tr>
<tr>
<td>MATH 2630</td>
<td>Calculus with Applications</td>
<td>3 credits</td>
</tr>
<tr>
<td>MATH 2640</td>
<td>Calculus and Analytic Geometry</td>
<td>4 credits</td>
</tr>
</tbody>
</table>

Wellness (1 credit)

Students must choose one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSED 1000</td>
<td>Fitness Assessment/Management</td>
<td>1 credit</td>
</tr>
<tr>
<td>WOMSTD 2430</td>
<td>Women and Health (G)</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Physical Activity (1 credit)

Students must choose one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 1820</td>
<td>Marching Pioneers</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1020</td>
<td>Criminal Justice Fitness</td>
<td>2 credits</td>
</tr>
<tr>
<td>PHYSED 1040</td>
<td>Canoe, Kayak and/or Rafting</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1100</td>
<td>Seasonal Activities</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1110</td>
<td>Weight Training</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1120</td>
<td>Aerobic Weight Training</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1130</td>
<td>Badminton</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1140</td>
<td>Basketball</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1150</td>
<td>Cycling</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1190</td>
<td>Golf</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1200</td>
<td>Self Defense</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1210</td>
<td>Golf</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1220</td>
<td>Hydroaerobics</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1230</td>
<td>Jogging/Walking</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1240</td>
<td>Racquetball</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1250</td>
<td>Relaxation</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1280</td>
<td>Personal Conditioning</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1290</td>
<td>Racquetball/Badminton</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1300</td>
<td>Personal Fitness</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1310</td>
<td>Scuba Diving</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1330</td>
<td>Cross Country Skiing</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1340</td>
<td>Soccer</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1360</td>
<td>Canoeing</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHYSED 1370</td>
<td>Dance Tech/Practice</td>
<td>1 credit</td>
</tr>
</tbody>
</table>
B. Liberal Arts Requirements

**Humanities (HUM), Fine Arts (FA) and Historical Perspective (HP) (12 credits)**

The humanities, fine arts and historical perspective requirements are met by taking at least three credits in approved courses in each of the three areas below (Humanities, Fine Arts and Historical Perspective). The remaining three credits must be a second course in the same specific discipline chosen for either the Humanities, Fine Arts or Historical Perspective. Exception: Those courses designated as “second course only” need not be from the same discipline in order to fulfill this requirement.

**Humanities (HUM) (3 credits)**

All courses listed below under the area of Humanities that are NOT designated as (second course only) may be used as a first or second Humanities course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 1330</td>
<td>Introduction to Literature</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 1430</td>
<td>Thematic Studies in Literature</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2050</td>
<td>Science Fiction</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2130</td>
<td>English Lit: Beginnings through Commonwealth</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2150</td>
<td>Introduction to Gay Studies (IE, HUM second course only)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2230</td>
<td>English Lit: Restoration through Romantic Age</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2250</td>
<td>Introduction to Film (HUM second course only)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2330</td>
<td>English Lit: Victorian Age to Present</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2430</td>
<td>American Lit through the Civil War</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2530</td>
<td>American Lit since the Civil War</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2640</td>
<td>World Literature I (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2650</td>
<td>World Literature II (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2730</td>
<td>Contemporary Literature</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2770</td>
<td>International Cinema (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2780</td>
<td>Race and Gender in American Film (EGS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2830</td>
<td>Survey Women Writers (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 2930</td>
<td>Minority Women Writers of the U.S. (EGS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 3110</td>
<td>Gay and Lesbian Literature for Young Adolescents (HUM second course only)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 3130</td>
<td>English Novel through Romantic Movement</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 3230</td>
<td>English Novel and Short Story since Romantic Movement</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 3260</td>
<td>Language and Culture</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 3280</td>
<td>Gay and Lesbian Literature</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 3330</td>
<td>English Drama</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 3410</td>
<td>Chicano Literature (E)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 3430</td>
<td>Development of the American Novel</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH 3530</td>
<td>Modern American Drama</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

**ENGLISH 3630** Mark Twain and American Humor 3 credits

**ENGLISH 3730** Black Literature in America (E) 3 credits

**ENGLISH 3740** Asian American Literature (E) 3 credits

**ENGLISH 3750** American Literature of Ethnicity and Immigration (E) 3 credits

**ENGLISH 3760** Wisconsin Indian Literature (E) 3 credits

**ENGLISH 3810** Modern Short Story 3 credits

**ENGLISH 3820** Modern Poetry 3 credits

**ENGLISH 3830** World Novel (IE) 3 credits

**ENGLISH 3850** Postcolonial Literature (IE) 3 credits

**ENGLISH 3890** Film and Literature 3 credits

**ENGLISH 3910** Classical Mythology 3 credits

**ENGLISH 4020** History and Theory of Rhetoric (HUM second course only) 3 credits

**ENGLISH 4030** Major English Writers 3 credits

**ENGLISH 4080** Medieval Lyric Poetry 3 credits

**ENGLISH 4300** English, Renaissance Poetry and Prose 3 credits

**ENGLISH 4330** Shakespeare 3 credits

**ENGLISH 4430** Major American Writers 3 credits

**ENGLISH 4500** Women and Myth: Goddess, Witch, Sibyl (G,IE) 3 credits

**ENGLISH 4530** Literature and the Critic 3 credits

**ETHNSTDY 2130** The Native American Experience (E) 3 credits

**ETHNSTDY 2930** Minority Women Writers 3 credits of the U.S. (EGS)

**ETHNSTDY 3410** Chicano Literature (E) 3 credits

**ETHNSTDY 3730** Black Literature in America (E) 3 credits

**ETHNSTDY 3740** Asian American Literature (E) 3 credits

**ETHNSTDY 3750** American Literature of Ethnicity and Immigration (E) 3 credits

**ETHNSTDY 3760** Wisconsin Indian Literature (E) 3 credits

**FRENCH 1140** Elementary French 4 credits (HUM second course only)

**FRENCH 2040** Intermediate French 4 credits

**FRENCH 2140** Intermediate French 4 credits

**FRENCH 3000** Travel Abroad Seminar (IE) 1-4 credits

**FRENCH 3530** Topics in French Lit/Culture 1-3 credits

**FRENCH 4060** Survey French Lit/Culture I 3 credits

**FRENCH 4160** Survey French Lit/Culture II 3 credits

**GERMAN 1340** Elementary German 4 credits (HUM second course only)

**GERMAN 2240** Intermediate German 4 credits

**GERMAN 2340** Intermediate German 4 credits

**GERMAN 3000** Travel Abroad Seminar (IE) 1-4 credits

**GERMAN 3330** German Literature 20th Century 3 credits

**GERMAN 3530** German Civilization 3 credits

**PHLSPHY 1130** Introduction to Philosophy 3 credits

**PHLSPHY 2130** Peace Studies 3 credits

**PHLSPHY 2230** Contemporary World Views (IE) 3 credits

**PHLSPHY 2330** Origins of Western Philosophy 3 credits (HUM or HP second course only)

**PHLSPHY 2430** Philosophy in the Modern World 3 credits (HUM or HP second course only)

**PHLSPHY 2530** Ethics 3 credits

**PHLSPHY 2540** Science Technology and Ethics 3 credits

**PHLSPHY 2730** Introduction to the Hebrew Scriptures 3 credits (HUM or HP second course only)

**PHLSPHY 2830** Introduction to the New Testament 3 credits

**PHLSPHY 2930** Major Traditions in Eastern Religions (IE) 3 credits

**PHLSPHY 2940** Special Topics in Philosophy 3 credits

**PHLSPHY 3130** Philosophy of History 3 credits

**PHLSPHY 3230** Philosophy of Religion 3 credits

**PHLSPHY 3330** Ontology and Ethics 3 credits

**PHLSPHY 3530** Philosophy's Feminist Future (G) 3 credits

**PHLSPHY 3630** Philosophy of Law 3 credits
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1230</td>
<td>Art and Children's Literature for Teachers</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 1240</td>
<td>Art and Social Studies for Teachers</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 2140</td>
<td>Art History I: Ancient Medieval</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 2210</td>
<td>Art History II: Renaissance-1879</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 2430</td>
<td>Art Survey</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 2730</td>
<td>Art History IV: Ethnic Art in U.S. (E)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 2750</td>
<td>Native American Art (E)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 3040</td>
<td>Art Education and Social Studies</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 3340</td>
<td>Art History III: Modern</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 3530</td>
<td>Art History V: Far Eastern Art (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART 4230</td>
<td>Theory of Art</td>
<td>3 credits</td>
</tr>
<tr>
<td>ETHNSTDY 2730</td>
<td>Art History IV: Ethnic Art in the U.S. (E)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ETHNSTDY 2750</td>
<td>Native American Art (E)</td>
<td>3 credits</td>
</tr>
<tr>
<td>MUSIC 1590</td>
<td>Music Appreciation</td>
<td>3 credits</td>
</tr>
<tr>
<td>MUSIC 2450</td>
<td>World Music Survey</td>
<td>3 credits</td>
</tr>
<tr>
<td>MUSIC 2550</td>
<td>American Music</td>
<td>3 credits</td>
</tr>
<tr>
<td>MUSIC 2650</td>
<td>History of Jazz</td>
<td>3 credits</td>
</tr>
<tr>
<td>MUSIC 2750</td>
<td>History of American Musical Theatre</td>
<td>3 credits</td>
</tr>
<tr>
<td>MUSIC 2850</td>
<td>History of Rock and Roll</td>
<td>3 credits</td>
</tr>
<tr>
<td>MUSIC 3250</td>
<td>History and Literature of Western Music III</td>
<td>3 credits</td>
</tr>
<tr>
<td>MUSIC 3350</td>
<td>History and Literature of Western Music IV</td>
<td>3 credits</td>
</tr>
<tr>
<td>THEATER 1130</td>
<td>Introduction to the Theater</td>
<td>3 credits</td>
</tr>
<tr>
<td>THEATER 4220</td>
<td>Recent Contemporary Drama</td>
<td>3 credits</td>
</tr>
<tr>
<td>THEATER 4630</td>
<td>History of Theater and Drama</td>
<td>3 credits</td>
</tr>
<tr>
<td>THEATER 4730</td>
<td>History of Theater</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD 3430</td>
<td>Women and the Arts (G)</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

**Fine Arts (FA) (3 credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHILSPHY 3740</td>
<td>Continental Philosophy</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHILSPHY 3840</td>
<td>Existentialism</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHILSPHY 4430</td>
<td>Seminar in Philosophy</td>
<td>3 credits</td>
</tr>
<tr>
<td>SPANISH 1940</td>
<td>Elementary Spanish (HUM second course only)</td>
<td>4 credits</td>
</tr>
<tr>
<td>SPANISH 2840</td>
<td>Intermediate Spanish</td>
<td>4 credits</td>
</tr>
<tr>
<td>SPANISH 3000</td>
<td>Travel Abroad Seminar (IE)</td>
<td>1-4 credits</td>
</tr>
<tr>
<td>SPANISH 3830</td>
<td>Spanish Civilization</td>
<td>3 credits</td>
</tr>
<tr>
<td>SPANISH 3840</td>
<td>Topics in Hispanic Literature/Culture</td>
<td>1-3 credits</td>
</tr>
<tr>
<td>SPANISH 3850</td>
<td>Spanish American Lit/Culture I</td>
<td>3 credits</td>
</tr>
<tr>
<td>SPANISH 3860</td>
<td>Spanish American Lit/Culture II</td>
<td>3 credits</td>
</tr>
<tr>
<td>SPANISH 4620</td>
<td>Cervantes</td>
<td>2 credits</td>
</tr>
<tr>
<td>SPANISH 4720</td>
<td>Spanish Lit of the 20th Century</td>
<td>2 credits</td>
</tr>
<tr>
<td>SPANISH 4830</td>
<td>Intro. to Spanish Lit</td>
<td>3 credits</td>
</tr>
<tr>
<td>SPANISH 4930</td>
<td>Intro. to Spanish Lit</td>
<td>3 credits</td>
</tr>
<tr>
<td>SPEECH 4020</td>
<td>History and Theory of Rhetoric (HUM second course only)</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD 1130</td>
<td>Introduction to Women's Studies (G, HUM, or SS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD 2830</td>
<td>Survey Women Writers (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD 2930</td>
<td>Minority Women Writers of the U.S. (EGS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD 3530</td>
<td>Philosophy's Feminist Future (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD 4500</td>
<td>Women and Mythology: Goddess, Witch, Sibyl (G, IE)</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

**Historical Perspective (HP) (3 credits)**

All courses listed below under the area of historical perspective that are NOT designated as (second course only) may be used as a first or second historical perspective course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECONOMIC 3210</td>
<td>History of Economic Thought</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3530</td>
<td>Econ. History of U.S.: 1st 300 years</td>
<td>3 credits</td>
</tr>
<tr>
<td>ETHNSTDY 3010</td>
<td>Race, Gender, and U.S. Labor</td>
<td>3 credits</td>
</tr>
<tr>
<td>ETHNSTDY 3240</td>
<td>African-American History: 1619 to Present (E)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ETHNSTDY 3400</td>
<td>History of Chicano Peoples in the U.S. (E)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 1010</td>
<td>World Civilization I</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 1020</td>
<td>World Civilization II (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 1330</td>
<td>History of the U.S. 1492-1877</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 1430</td>
<td>History of the U.S. since 1877</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3010</td>
<td>Race, Gender, and U.S. Labor</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3070</td>
<td>Latin American History (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3080</td>
<td>American Military History</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3120</td>
<td>American Colonial History</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3130</td>
<td>New Nation</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3140</td>
<td>Civil War and Reconstruction</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3150</td>
<td>Gilded Age and Progressive Era</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3230</td>
<td>West in American History</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3240</td>
<td>African-American History: 1619 to Present (E)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3320</td>
<td>History of Wisconsin (HP second course only)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3400</td>
<td>The Vietnam War</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3430</td>
<td>Twentieth Century America</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3450</td>
<td>History of U.S. Foreign Relations</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3480</td>
<td>The United States Since 1945</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3520</td>
<td>American Women's History (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3610</td>
<td>History of England to 1714</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3620</td>
<td>History of England since 1714</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3640</td>
<td>Imperialism in Africa and Asia (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3700</td>
<td>Women in European Civilization (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3710</td>
<td>Ancient Civilizations</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3730</td>
<td>Medieval Europe</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3740</td>
<td>Renaissance and the Reformation</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3830</td>
<td>French Revolution and Napoleon 1789-1815</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3850</td>
<td>Twentieth Century Europe</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3860</td>
<td>History of Western Science</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3870</td>
<td>Nazi Germany and the Holocaust</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3880</td>
<td>Modern Europe Thought and Culture</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3920</td>
<td>Modern Middle East (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3930</td>
<td>East Asia (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3950</td>
<td>Modern Japan (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 3970</td>
<td>Modern China (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 4110</td>
<td>Russia under the Romanovs (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY 4120</td>
<td>Modern Russia (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHILSPHY 2330</td>
<td>Origins of Western Philosophy (HUM or HP second course only)</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHILSPHY 2430</td>
<td>Philosophy in the Modern World (HUM or HP second course only)</td>
<td>3 credits</td>
</tr>
<tr>
<td>POLISCI 3340</td>
<td>Modern Japan (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>POLISCI 3350</td>
<td>Modern China (IE)</td>
<td>3 credits</td>
</tr>
</tbody>
</table>
ECONOMIC 1130 Introduction to Economics 3 credits
ECONOMIC 1230 Principles of Microeconomics 3 credits
ECONOMIC 1330 Principles of Macroeconomics 3 credits
ECONOMIC 2130 Microeconomics 3 credits
ECONOMIC 2230 Microeconomics 3 credits
ECONOMIC 2330 Macroeconomics 3 credits
ECONOMIC 2430 Principles of Economics 3 credits
ECONOMIC 2530 Principles of Economics 3 credits
ECONOMIC 2630 Principles of Economics 3 credits
ECONOMIC 2730 Principles of Economics 3 credits
ECONOMIC 2830 Principles of Economics 3 credits
ECONOMIC 2930 Principles of Economics 3 credits
ECONOMIC 3130 Principles of Economics 3 credits
ECONOMIC 3230 Principles of Economics 3 credits
ECONOMIC 3330 Principles of Economics 3 credits
ECONOMIC 3430 Principles of Economics 3 credits
ECONOMIC 3530 Principles of Economics 3 credits
ECONOMIC 3630 Principles of Economics 3 credits
ECONOMIC 3730 Principles of Economics 3 credits
ECONOMIC 3830 Principles of Economics 3 credits
ECONOMIC 3930 Principles of Economics 3 credits
ECONOMIC 4030 Principles of Economics 3 credits
ECONOMIC 4130 Principles of Economics 3 credits
ECONOMIC 4230 Principles of Economics 3 credits
ECONOMIC 4330 Principles of Economics 3 credits
ECONOMIC 4430 Principles of Economics 3 credits

Second Course (3 credits)

To complete the final 3 credits in Humanities, Fine Arts and Historical Perspectives, a student must select either a second course in the same specific discipline or a class designated as "second course only." Prerequisite requirements must be met for any course taken to fulfill this area.

C. Social Sciences (SS) (9 credits)

At least 3 credits must be taken in approved courses in each of two disciplines listed below (Agricultural Industries, Communication, Criminal Justice, Economics, Ethnic Studies, Geography, Political Science, Psychology, Sociology, Speech, and Women's Studies). The remaining 3 credits must be a second course in one of the two disciplines previously chosen.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 2330</td>
<td>World Population, Food and Resource (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>COMMNCTN 1630</td>
<td>Introduction to Mass Media</td>
<td>3 credits</td>
</tr>
<tr>
<td>CRIMLJUS 3770</td>
<td>Theories of Media and Culture</td>
<td>3 credits</td>
</tr>
<tr>
<td>CRIMLJUS 1130</td>
<td>Introduction to Criminal Justice</td>
<td>3 credits</td>
</tr>
<tr>
<td>CRIMLJUS 3730</td>
<td>Women and the Law (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 2130</td>
<td>Principles of Macroeconomics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 2230</td>
<td>Principles of Microeconomics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 2250</td>
<td>Economics and Western History I</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 2260</td>
<td>Economics and Western History II</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 2410</td>
<td>Interpretation of Business and Data Analysis</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 2940</td>
<td>Political Economy, Race, Gender, and Ethnicity (EGS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3210</td>
<td>History of Economic Thought (SS or second course only in HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3220</td>
<td>Introduction to Managerial Economics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3330</td>
<td>Intermediate Micro-economic Analysis</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3340</td>
<td>Intermediate Micro-economic Analysis</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3420</td>
<td>Consumer Economics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3430</td>
<td>Labor Economics and Labor Relations</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3630</td>
<td>Comparative Economic Systems (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3730</td>
<td>Money and Banking</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 3830</td>
<td>Public Finance</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 4330</td>
<td>International Economics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 4930</td>
<td>Senior Seminar</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECONOMIC 4940</td>
<td>Special Problems 1-4</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENERGY 2130</td>
<td>Energy, Environment and Society</td>
<td>3 credits</td>
</tr>
<tr>
<td>ETHNSTDY 2940</td>
<td>Political Economy, Race, Gender, and Ethnicity (EGS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ETHNSTDY 3230</td>
<td>Human Relations (EGS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ETHNSTDY 3720</td>
<td>Ethnic Rights and Politics (E)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRAPHY 1230</td>
<td>Survey of Cultural Geography (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRAPHY 1330</td>
<td>World Regional Geography (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRAPHY 3030</td>
<td>Economic Geography (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRAPHY 3120</td>
<td>Geography of Wisconsin</td>
<td>2 credits</td>
</tr>
<tr>
<td>GEOGRAPHY 3130</td>
<td>Geography of the U.S. and Canada</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRAPHY 3170</td>
<td>Space, Place and Gender (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRAPHY 3330</td>
<td>Environmental Conservation</td>
<td>3 credits</td>
</tr>
</tbody>
</table>
D. Natural Sciences (NS) (9 credits)

The credits must be taken in approved courses in two different areas (Biology, Chemistry, Geography, Geology, Physics and Physical Science). All courses must involve a laboratory experience.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCSI</td>
<td>Plant Development and Biotechnology</td>
<td>4 credits</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>General Biology</td>
<td>5 credits</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>General Botany</td>
<td>5 credits</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>Anatomy and Physiology I</td>
<td>4 credits</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>Anatomy and Physiology II</td>
<td>4 credits</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>Tropical Marine Ecosystems (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>Essentials of Anatomy and Physiology 4</td>
<td></td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>General Chemistry</td>
<td>5 credits</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>General Chemistry</td>
<td>4 credits</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>Chemistry for Engineers</td>
<td>5 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Planet Earth</td>
<td>4 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Global Landforms</td>
<td>4 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Physical Geography: Weather and Climate</td>
<td>4 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Biogeography</td>
<td>4 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Global Vegetation</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Tropical Marine Ecosystems (IE)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Oceanography</td>
<td>4 credits</td>
</tr>
<tr>
<td>GEOLOGY</td>
<td>Physical Geology</td>
<td>4 credits</td>
</tr>
<tr>
<td>GEOLOGY</td>
<td>Historical Geography</td>
<td>4 credits</td>
</tr>
<tr>
<td>GEOLOGY</td>
<td>History of Life</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>Principles of Physics</td>
<td>5 credits</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>Introductory Physics I</td>
<td>5 credits</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>Introductory Physics II</td>
<td>5 credits</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>General Physics I</td>
<td>5 credits</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>General Physics II</td>
<td>5 credits</td>
</tr>
<tr>
<td>PHSC</td>
<td>Physical Science</td>
<td>5 credits</td>
</tr>
<tr>
<td>PHSC</td>
<td>Introductory Astronomy Lab</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHSC</td>
<td>Introductory Astronomy</td>
<td>4 credits</td>
</tr>
</tbody>
</table>

E. International Education (IE), Ethnic Studies (E), Gender Studies (G), Ethnic and Gender Studies (EGS) (6-9 credits)

International Education (IE) (3 credits)

In addition to courses approved for international education, the international education requirement may be satisfied through documented course work undertaken through participation in foreign exchange programs or study abroad programs. Short-term visits of less than six weeks duration and/or trips undertaken primarily for tourism or recreational purposes may not be used to fulfill this requirement.

At least 3 credits must be taken to satisfy the international education requirement. The following courses are approved for the international education requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOMSTD</td>
<td>Women, Sex Roles and Society (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD</td>
<td>Psychology of Women (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD</td>
<td>Women in Science and Engineering (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD</td>
<td>Women and the Law (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>WOMSTD</td>
<td>Space, Place, and Gender (G)</td>
<td>3 credits</td>
</tr>
<tr>
<td>AGINDUS</td>
<td>World Population, Food and Resources (SS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>AGINDUS</td>
<td>Faculty-Led Short-Term International Experience</td>
<td>3 credits</td>
</tr>
<tr>
<td>AGSCI</td>
<td>Faculty-Led Short-Term International Experience</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART</td>
<td>Art History V: Far Eastern Art (FA)</td>
<td>3 credits</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>Plants and Society</td>
<td>3 credits</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>Tropical Marine Ecosystems (NS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>BUSADMIN</td>
<td>Global Business</td>
<td>3 credits</td>
</tr>
<tr>
<td>BUSADMIN</td>
<td>International Short Study</td>
<td>1-3 credits</td>
</tr>
<tr>
<td>ECONOMIC</td>
<td>Comparative Economic Systems (SS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>Introduction to Gay Studies</td>
<td>3 credits</td>
</tr>
<tr>
<td>FRENCH</td>
<td>Travel Abroad Seminar (HUM)</td>
<td>1-4 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Survey of Cultural Geography (SS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Tropical Marine Ecosystems (NS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>World Regional Geography (SS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Economic Geography (SS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Geography and Development of Middle East Geography (SS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Geography of Africa (SS)</td>
<td>3 credits</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Topics in Regional Geography (SS)</td>
<td>2 or 3 credits</td>
</tr>
<tr>
<td>GERMAN</td>
<td>Travel Abroad Seminar (HUM)</td>
<td>1-4 credits</td>
</tr>
<tr>
<td>HISTORY</td>
<td>World Civilization II (HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY</td>
<td>Latin American History (HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY</td>
<td>Imperialism in Africa and Asia (HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY</td>
<td>Modern Middle East (HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY</td>
<td>East Asia (HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY</td>
<td>Modern Japan (HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY</td>
<td>Modern China (HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY</td>
<td>Russia to 1856 (HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>HISTORY</td>
<td>Modern Russia (HP)</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Contemporary World Views (HUM)</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Major Traditions in Eastern Religions (HUM)</td>
<td>3 credits</td>
</tr>
</tbody>
</table>
Ethnic and Gender Studies Courses (EGS) (3-6 credits)

Three credits must be taken in approved courses to satisfy the ethnic and gender studies requirement. Students can take one 3 credit course counting for both ethnic and gender studies or take 6 credits, one 3 credit course counting for ethnic studies and one 3 credit course counting for gender studies. Students may select from the following:

(If the course carries other liberal arts credit, that area is also listed)

(Topic courses may or may not count for ethnic, gender or both, depending on course content)

Courses that count for BOTH Ethnic and Gender Studies credit (EGS):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSADMIN 3340</td>
<td>Management, Gender, and Race</td>
<td>3</td>
</tr>
<tr>
<td>ECONOMIC 2940</td>
<td>Political Economy, Race, Gender, and Ethnicity (SS)</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 2780</td>
<td>Race and Gender in American Film (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 2930</td>
<td>Minority Women Writers of the U.S. (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 1030</td>
<td>Race, Gender, and Class in the United States</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 2930</td>
<td>Minority Women Writers of the U.S. (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 2940</td>
<td>Political Economy of Race, Gender, and Ethnicity (SS)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3230</td>
<td>Human Relations (SS)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3340</td>
<td>Management, Gender and Race in Education</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3630</td>
<td>Ethnic and Gender Equity in Education</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3830</td>
<td>Black Women and Feminism in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>POLISCI 2940</td>
<td>Political Economy, Race, Gender, and Ethnicity (SS)</td>
<td>3</td>
</tr>
<tr>
<td>SOCIOLOGY 3230</td>
<td>Human Relations (SS)</td>
<td>3</td>
</tr>
<tr>
<td>TEACHING 3630</td>
<td>Ethnic and Gender Equity in Education</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 2930</td>
<td>Minority Women Writers of the U.S. (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 3340</td>
<td>Management, Gender, and Race in Education</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 3630</td>
<td>Ethnic and Gender Equity in Education</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 3830</td>
<td>Black Women and Feminism in the U.S.</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses that count for Ethnic Studies credit (E):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2730</td>
<td>Art History IV: Ethnic Art in the U.S. (FA)</td>
<td>3</td>
</tr>
<tr>
<td>ART 2750</td>
<td>Native American Art (FA)</td>
<td>3</td>
</tr>
<tr>
<td>CRIMLJUS 2830</td>
<td>Ethnicity, Race, and Crime</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 3410</td>
<td>Chicano Literature (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 3730</td>
<td>Black Literature in America (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 3740</td>
<td>Asian American Literature (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 3750</td>
<td>American Lit of Ethnicity and Immigration (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 3760</td>
<td>Wisconsin Indian Literature (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 2130</td>
<td>The Native American Experience (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 2200</td>
<td>Introduction to Ethnic Studies</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 2230</td>
<td>Black Experience in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 2730</td>
<td>Art History IV: Ethnic Art in the U.S. (FA)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 2750</td>
<td>Native American Art (FA)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 2830</td>
<td>Ethnicity, Race, and Crime</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3010</td>
<td>Race, Gender, and U.S. Labor History (HP)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3240</td>
<td>African-American History: 1619 to present (HP)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3400</td>
<td>History of Chicanos (HP)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3410</td>
<td>Chicano Literature (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3720</td>
<td>Ethnic Rights and Politics (SS)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3730</td>
<td>Black Literature in America (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3740</td>
<td>Asian American Literature (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3750</td>
<td>American Lit of Ethnicity and Immigration (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ETHNSTDY 3760</td>
<td>Wisconsin Indian Literature (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>HISTORY 3010</td>
<td>Race, Gender, and U.S. Labor History (HP)</td>
<td>3</td>
</tr>
<tr>
<td>HISTORY 3240</td>
<td>African-American History: 1619 to present (HP)</td>
<td>3</td>
</tr>
<tr>
<td>POLISCI 3730</td>
<td>Ethnic Rights and Politics (SS)</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses that count for Gender Studies credit (G):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 3730</td>
<td>Women and the Law (SS)</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 2830</td>
<td>Survey of Women Writers (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 4500</td>
<td>Women and Myth: Goddess, Witch, Sibyl (HUM, IE)</td>
<td>3</td>
</tr>
<tr>
<td>GEOGRPHY 3170</td>
<td>Space, Place and Gender (SS)</td>
<td>3</td>
</tr>
<tr>
<td>GEOGRPHY 4350</td>
<td>Gender Relations in Cross Cultural Perspectives (SS)</td>
<td>3</td>
</tr>
<tr>
<td>HISTORY 3520</td>
<td>American Women's History (HP)</td>
<td>3</td>
</tr>
<tr>
<td>HISTORY 3700</td>
<td>Women in European Civilization (HP)</td>
<td>3</td>
</tr>
<tr>
<td>PHLSPHY 3530</td>
<td>Philosophy's Feminist Future (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>PSYCHLGY 2530</td>
<td>Psychology of Women (SS)</td>
<td>3</td>
</tr>
<tr>
<td>SOCIOLOGY 2230</td>
<td>Women, Sex Roles and Sociology (SS)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 1130</td>
<td>Introduction to Women's Studies (SS) or (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 2230</td>
<td>Women, Sex Roles and Sociology (SS)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 2430</td>
<td>Women and Health (PE-WELLNESS)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 2530</td>
<td>Psychology of Women (SS)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 2730</td>
<td>Women in Science and Engineering (SS)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 2830</td>
<td>Survey of Women Writers (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 3170</td>
<td>Space, Place and Gender (SS)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 3330</td>
<td>Topics in Women's Studies</td>
<td>2-3</td>
</tr>
<tr>
<td>WOMSTD 3430</td>
<td>Women and the Arts (FA)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 3520</td>
<td>American Women's History (HP)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 3530</td>
<td>Philosophy's Feminist Future (HUM)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 3700</td>
<td>Women in European Civilization (HP)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 3730</td>
<td>Women and the Law (SS)</td>
<td>3</td>
</tr>
<tr>
<td>WOMSTD 4500</td>
<td>Women and Myth: Goddess, Witch, Sibyl (HUM, IE)</td>
<td>3</td>
</tr>
</tbody>
</table>
Special Academic Programs

Many programs are offered at UW-Platteville. Some of these programs deserve special mention not only because they are unique strengths at UW-Platteville but also because they suggest the depth of our commitment to a rich and varied curriculum serving the needs of all students.

University Honors Program

Director: Dr. Nancy Turner
Office: 332 Warner Hall
Phone: 608.342.1789
E-mail: turnern@uwplatt.edu

The aim of this program is to provide exceptional students with opportunities to study the problems, ideas and methods of the liberal arts with an intensity, depth and perspective that cannot usually be achieved in regular courses.

Since 1991, the Honors Program Council, comprised of faculty members from each college in the university, has been organizing and administering special liberal-education courses for those undergraduates who have demonstrated high academic promise.

Benefits of the Honors Program

By participating in the Honors Program, students gain a number of important benefits:

- intellectual growth produced by working on challenging and extraordinary problems under the close supervision of excellent teachers and in cooperation with some of the best students in the university;
- an increase in academic skills and self-confidence produced by having to meet the high academic standards of honors courses;
- a special “honors” notation on their transcripts for students who complete the honors requirements; and
- fulfillment of many of the university's general education requirements through completion of certain honors courses.

Admission to the Honors Program

Each May, the Director of the University Honors Program invites qualified members of the incoming freshman class to submit applications for acceptance into the program. To qualify, a student must have a composite ACT score of at least 27, a SAT score of 1250 or higher, have graduated in the top 10 percent of their high school class or a GPA of at least 3.3 after 30 hours of course work at UW-Platteville and/or other accredited institutions of higher education.

The director may waive the formal admission requirements for students who present evidence that their academic record does not reflect their true capacity to benefit from honors work.

Requirements for the Honors Certificate

Honors students may pursue an Honors Certificate at the same time they are pursuing a regular major. The Honors Certificate requires:

- a consistently maintained accumulated GPA of 3.3 or above;
- 24 credits in courses with an “honors” designation taken over eight semesters. These 24 credits may be used to satisfy portions of the general education requirements;
- a one semester senior capstone experience (i.e. an independent study “honors thesis”) consisting of a 20-25 page research paper written under the guidance of a faculty member chosen by the student.

Honors Courses

Every semester, three to six honors courses will be offered with class size in each limited to 20 students (average class size is 14 students). These courses will include general introductory courses such as History of World Civilization, General Psychology or Introduction to American Government. Honors students in any major may take these courses in order to fulfill their general education requirements. Other honors offerings will be upper-level courses such as English Drama, The Native American Experience or Historical Geology, which will also satisfy general education requirements for most students.

Pioneer Academic Center for Community Engagement (PACCE)

Director: Kevin Bernhardt
Office: 2513 Ullsvik Hall
Phone: 608.342.6121
E-mail: pacce@uwplatt.edu
Website: www.uwplatt.edu/pacce/

The Pioneer Academic Center for Community Engagement (PACCE) is a scholarship of engagement program that facilitates and supports enhanced student learning through students engaging in community-based projects with community people, actual situations and real consequences. The Center's mission is to nurture a campus environment that empowers students, faculty and community partners to Experience - Grow - Make a Difference.

PACCE administers the Pioneer Engagement Scholars program which provides funding to offset student expenses incurred in the implementation of for-credit community-based projects. Expenses include travel, materials and supplies, consulting fees, publication and other services. Projects must be for academic credit, include student, community and faculty partners, and involve significant interaction with community partners. The center also provides funding for engagement internships.
First-Year Experience Program

Director: D. Joanne Wilson
Office: 1st Floor Brigham Hall
Phone: 608.342.1081
E-mail: wilsonj@uwplatt.edu

The First-Year Experience (FYE) Program is dedicated to creating opportunities for students to develop successful academic and social skills. The Executive Director of FYE coordinates the Introduction to College Life courses and the Seminar for Academic Success series in cooperation with the residence halls. Seminar topics include: study skills, time management, understanding academic policies, test-taking strategies, effective utilization of textbooks, healthy living and study habits, appreciation for learning style differences, comparing high school and college expectations, note-taking, respect for diverse cultures and the advising and pre-registration process. Additional programs include academic advising for students that are academically at risk. For more information, visit us at www.uwplatt.edu/firstyear.

Pre-Professional Programs

Many students enroll at UW-Platteville for course work before completing their education at another professional school or college. Pre-professional curricula for a variety of professions have been developed. A student enrolling in one of the pre-professional programs will be assigned a faculty advisor who will assist in developing course schedules and preparing for entrance into a professional school of the student's choice. A faculty advisor has been identified as the contact person for each program listed below.

Each student interested in a specific pre-professional program is strongly encouraged to seek the advice of the contact person to ensure appropriate advising.

Pre-Chiropractic

Advisor: Wayne Weber
Office: 262 Gardner Hall
Phone: 608.342.1611

Chiropractic is a natural approach to health issues that concerns itself with the integration of the body's systems and organs. The Doctor of Chiropractic specializes in the adjustment of the spine and the relationship between the spinal vertebrae and the nervous system and their relationship to health and disease without the use of drugs or surgery.

The UW-Platteville program normally requires completion of a bachelor's degree and the fulfillment of other requirements of the chiropractic school. Occasionally a student enters chiropractic school after three years of course work.

Pre-Cytotechnology

Advisor: Esther Ofulue
Office: 250 Gardner Hall
Phone: 608.342.1331

Cytotechnology is the study of cell structure and function. Cytotechnologists are integral members of the health care team. They apply their special skills in microscopy and staining techniques to determine aberrations in cellular structures and provide physicians with preliminary diagnosis of diseases. The ability of cytotechnologists to accurately perform diagnostic procedures enables effective prevention or early treatment of diseases such as cancer. They can also work as health educators, laboratory managers and administrators or researchers.

UW-Platteville has a 3 + 1 articulation with UW-Madison School of Cytotechnology and State Lab of Hygiene. Students are required to complete two to three years of course work at UWP for admission to UW-Madison or other professional schools.

Pre-Dentistry

Advisor: Wayne Weber
Office: 262 Gardner Hall
Phone: 608.342.1611

Dentistry is the science or profession concerned with the teeth and associated structures of the mouth. It involves the prevention, diagnosis and treatment of disease, injury or malfunction of the teeth, gums and jaws. Dentists practice in several specialties using a full range of techniques.

The UW-Platteville program consists of selected courses that help to provide a basic body of knowledge to meet the admission requirements for schools of dentistry. Admission to a school of dentistry normally follows the fulfillment of requirements of the desired professional school in the completion of a Bachelor of Science degree in biology.

Pre-Law

Advisor: John Rink
Office: 140 Gardner Hall
Phone: 608.342.1795

Co-Advisor: Scott White
Office: 611 Pioneer Tower
Phone: 608.342.1499

Pre-Law is not an academic major or sequence of courses, but rather a program of activities designed to guide the undergraduate student interested in a career in law to make sound decisions and achieve success. This begins with the choice of an academic major of interest to the student and the selection of challenging courses which elicit and strengthen the student’s talent. The student receives academic advisement from an advisor in his or her major field and pre-law advisement from an experienced pre-law advisor.

The advantages of our Pre-Law program include the following:

• Award-winning and nationally recognized mock trial and mediation teams which compete in invitational, regional and national tournaments.
• An active Pre-Law Society which sponsors trips to pre-law events, tours of law schools and visiting speakers.
• Guidance in evaluating law-related careers.
• Advice in the selection of law schools and the opportunity to talk directly to admissions personnel at pre-law forums.
• Help in preparing for the Law School Admissions Test through our videotape prep course and the administration of practice tests.
• Law-related courses in such disciplines as political science, criminal justice and business administration which not only challenge the student but offer a taste of legal education as well.

We advise students interested in a career in law or in a field where a law degree is an advantage to take the following steps:

• Begin planning early.
• Choose challenging courses that emphasize reading, writing and research and build skill in analytical and critical thinking.
• Consult the pre-law advisor at the earliest opportunity.

We agree with the consensus of the legal profession that a broad liberal arts education which emphasizes the appreciation of human values, an awareness of socio-political thought and concern for the community and the environment are the best preparation for law school.

Pre-Medical Technology
Advisor: Esther Ofulue
Office: 250 Gardner Hall
Phone: 608.342.1331

The field of medical technology or clinical laboratory science is the medical application of the basic sciences in laboratory medicine. Members of this profession are responsible for providing accurate, reliable laboratory tests to determine the presence, absence, extent or cause of disease. Medical technologists (clinical laboratory scientists) use sophisticated chemical procedures, complex instruments and microscopic observation to relay information to physicians for diagnosis and treatment of disease.

The UW-Platteville program requires students to complete a two to three year course of study which fulfills the requirements for admission to a professional program.

Pre-Medicine
Advisor: Amanda Trewin
Office: 255 Gardner Hall
Phone: 608.342.1527

Medical doctors prevent, diagnose, treat and cure disease in their patients. Physicians practice in many medical specialties using a full range of health-care techniques aimed at maintaining and improving health.

The UW-Platteville program consists of selected courses which help to provide a basic body of knowledge necessary to meet the admission requirements for medical schools. Admission to a medical school normally follows the completion of a bachelor's degree.

Pre-Nursing
Advisor: Amanda Trewin
Office: 255 Gardner Hall
Phone: 608.342.1527

Nurses meet the physical and emotional needs of patients in a broad range of settings while providing care the physicians prescribe. Nurses must pass a state examination to become registered nurses (RNs). There are two basic routes toward this end:

1. An associate degree in nursing (ADN) obtained through a two or three year program at a technical college.
2. A bachelor of science degree in nursing (BSN) obtained through a four or five year program at a comprehensive university.

The UW-Platteville program is a two year program which helps to provide a body of information necessary to fulfill the academic requirements of a school of nursing. Admission to a school of nursing normally follows the second year of study at UW-Platteville.

Pre-Occupational Therapy
Advisor: Marilyn Tufte
Office: 253 Gardner Hall
Phone: 608.342.1664

Occupational therapy is a vital health care service that uses purposeful activity as the basis for treatment and prevention of a wide variety of physical, developmental and emotional disabilities. Occupational therapists plan programs which enable patients to practice self-care, learn personal and social behavior skills and gain more independence.

The UW-Platteville program for pre-occupational therapy students provides the necessary science background as well as an understanding of people and society necessary to gain entrance into the professional phase.
Pre-Optometry

Advisor: Wayne Weber  
Office: 262 Gardner Hall  
Phone: 608.342.1611

Optometry is the branch of health services concerned with the examination, diagnosis and treatment of conditions or impairments of the vision system. Doctors of Optometry are highly trained, state licensed practitioners who examine eyes and related structures to detect the presence of vision problems, eye diseases and other eye related problems. Optometrists are the major providers of vision care in this country.

The UW-Platteville program consists of selected courses that help to provide a basic body of knowledge to meet the admission requirements for schools of optometry. Admission to a school of optometry normally follows the fulfillment of requirements of the desired professional school in the completion of a Bachelor of Science degree in biology.

Pre-Osteopathy

Advisor: Amanda Trewin  
Office: 255 Gardner Hall  
Phone: 608.342.1527

Osteopathic medicine is one of two medical fields fully licensed and approved for the delivery of complete medical care. Osteopathic physicians practice in all recognized medical specialties, using the full range of health-care techniques in diagnosis and treatment. The distinctive feature of osteopathic medicine is the recognition of the interrelationship between the structure and function of the body, that is, traditional emphasis on “holistic” medicine or treating the patient as a whole person. One of the characteristic features and added dimensions of a Doctor of Osteopathy in terms of clinical practice is the utilization of manipulative therapy.

The UW-Platteville program consists of selected courses which help to provide a basic body of knowledge to meet the admission requirements for osteopathic schools. Admission to an osteopathic school normally follows the completion of a bachelor’s degree.

Pre-Pharmacy

Advisor: Qiong (June) Li  
Office: 314 Ottensman Hall  
Phone: 608.342.1498

Pharmacy has traditionally been the branch of health services concerned with the composition of medications, dosage forms, methods of preparation, tests for the purity and potency, as well as the proper medicinal use. The pharmacist is responsible for preparing, storing and dispensing medications. As an expert on the action of medication on the body, the pharmacist is called upon by physicians and the public alike concerning the use of prescribed and over-the-counter medications.

The UW-Platteville program involves two years of study in a selected group of courses. The courses provide the necessary science background as well as an understanding of people and institutions to prepare students for pharmacy school.

Pre-Physical Therapy

Advisor: Marilyn Tufte  
Office: 253 Gardner Hall  
Phone: 608.342.1664

Physical therapy is a dynamic health care profession. Physical therapists are skilled in planning, organizing and directing programs for the care of individuals of all ages who have been impaired by disease or injury. The physical therapist performs tests and evaluations which help to establish treatment objectives for the patient. In addition, the physical therapist works with the patient to carry out the objectives in ways that are realistic and consistent with daily needs.

The UW-Platteville program for pre-physical therapy students provide the necessary science background as well as an understanding of people and society to help students qualify for the professional program.

Pre-Physicians Assistant

Advisor: Wayne Weber  
Office: 262 Gardner Hall  
Phone: 608.342.1611

A physician assistant is a health care professional who functions as an extension of a physician and provides a wide range of medical services. Under the supervision of licensed physicians, physician assistants interview patients and record health histories, conduct physical examinations, order and interpret diagnostic tests, establish treatment plans, and educate patients in preventive medicine and health maintenance.

The UW-Platteville program is usually a four year course of study resulting in a bachelor's degree and the fulfillment of additional Physician Assistant professional school requirements.

Pre-Podiatry

Advisor: Amanda Trewin  
Office: 255 Gardner Hall  
Phone: 608.342.1527

Podiatry is concerned with the prevention, diagnosis and treatment of diseases and disorders affecting the human foot and its related structures. The podiatric physician provides both medical and surgical care and may become involved in research to advance the understanding of foot care.

The UW-Platteville program is designed to meet admission requirements for a school of podiatric medicine. Most students are admitted to a podiatry school after completion of a bachelor's degree.
Pre-Veterinary Medicine

**Advisor:** Sue Price  
**Office:** 214 Pioneer Tower  
**Phone:** 608.342.1613

Veterinary medicine applies modern medical science to the care of animals. The study of veterinary medicine is concerned with gaining a thorough knowledge of the fundamental biological and physical sciences relating to animal functions. In the clinical years, students correlate and apply this knowledge to the many areas of professional service.

The pre-veterinary medicine program at UW-Platteville (School of Agriculture and Biology Department) consists of selected courses, specified by veterinary colleges, that prepare students for admission into a four year program which culminates in the awarding of a doctorate in veterinary medicine. (Note: This program is administered by the School of Agriculture.)

Cooperative Education Programs

UW-Platteville advocates an education in which students in any major can blend theory and practice by combining classroom learning with planned and supervised field experiences. Students in the cooperative education programs alternate periods of full-time study with periods of experience in jobs closely related to their individual academic majors and career objectives. UW-Platteville is committed to the belief that cooperative education experiences make a significant contribution to the individual student's personal, social and professional development. Academic credit is granted for the field experience.

Cooperative education programs are managed by the major/program in which the student is enrolled. Students interested in cooperative education programs should contact their departmental office for further information.

Institute for Study Abroad Programs

**Contact:** Donna Anderson  
**Office:** 111 Royce Hall  
**Phone:** 608.342.1726

This institute was created at UW-Platteville in 1978 to develop and coordinate study abroad programs for the university and to provide resources in southwestern Wisconsin for international studies. The institute provides university students with an opportunity to coordinate study abroad programs for the university and to provide resources in southwestern Wisconsin for international studies.

Courses taken through the University of Wisconsin-Platteville's Office of Continuing Education are acceptable for renewal of Wisconsin's five-year teaching license. More information on this license is available on the DPI website: [http://dpi.wi.gov/tepdl/renewal.html](http://dpi.wi.gov/tepdl/renewal.html).

National Student Exchange Program

**Contact:** Admission and Enrollment Services  
**Office:** 1300 Ullsvik Hall  
**Phone:** 608.342.1125

The National Student Exchange Program is designed to provide UW-Platteville students an opportunity to study at more than 170 other NSOFTWARE member institutions for a semester or academic year while paying UWP tuition and fees. This program is nationally sanctioned and has placed more than 55,000 since its inception in 1968.

In order to be eligible, UWP students must have a cumulative grade average of 2.50 or higher, must be a full-time student and must agree to remain a full-time student during the exchange period. Since UWP is designated as an “even” exchange program, it is most important to know that unless otherwise stipulated, there should be the same number of students coming to UWP in the exchange program that are attending other NSOFTWARE institutions.

For further information about this highly successful and unique program, please contact the NSOFTWARE Coordinator or Assistant by calling 608.342.1127 or by stopping into 1300 Ullsvik Hall. The application and advising process is highly involved; consequently several months of careful planning before the annual March placement date is strongly suggested.

Continuing Education

**Contact:** Marian Maciej-Hiner  
**Office:** 2110 Ullsvik Hall  
**Phone:** 608.342.1314

The Office of Continuing Education, in a partnership between the University of Wisconsin-Platteville and University of Wisconsin-Extension, carries out the Wisconsin Idea of extending university resources beyond campus boundaries to the citizens of southwestern Wisconsin. The office coordinates credit classes, which are designed to meet the needs of adults who wish to learn about communicating with special student groups, new teaching strategies, social issues, educational research and technology in a school setting.

For more information, contact 608.342.1314 or toll-free 1.888.281.9472. Access course offerings electronically via www.uwplatt.edu/cont_ed.

Teacher Recertification

The Office of Continuing Education coordinates credit classes to meet the needs of educators who want to learn about communicating with special student groups, new teaching strategies, social issues, educational research and technology in a school setting.

Courses taken through the University of Wisconsin-Platteville’s Office of Continuing Education are acceptable for renewal of Wisconsin’s five-year teaching license. More information on this license is available on the DPI website: [http://dpi.wi.gov/tepdl/renewal.html](http://dpi.wi.gov/tepdl/renewal.html).
Child Care Administrator's Credential

Continuing Education offers a 6-course, 18 credit undergraduate (or no-credit) Credential Series in cooperation with The Registry and TEACH. The credential helps child care professionals earn the Wisconsin Professional Credential for Child Care Administrators. Course topics include: Administration/Supervision, Operations Management, Financial Management and Planning, Child Care in the External Environment, Best Practices and Administrator's Capstone.

Infant/Toddler Professional Credential

Continuing Education offers a 4-course, 12 credit undergraduate (or no-credit) Credential Series in cooperation with The Registry and TEACH. The credential helps child care professionals earn The Wisconsin Infant/Toddler Professional Credential. Course topics include Infant/Toddler Development, Group Care for Infants and Toddlers, Family and Community Relationships and Infant/Toddler Capstone.

Inclusion Professional Credential

Continuing Education offers a 4-course, 12 credit undergraduate (or no-credit) Credential Series in cooperation with The Registry and TEACH. The credential helps child care professionals earn The Wisconsin Inclusion Professional Credential. Course topics include Children with Differing Abilities, Children with Significant Behavioral Challenges, Children with Special Health Care Needs and Capstone: Family and Team Centered Practices.

Preschool Credential

Continuing Education offers a 6-course, 18 credit undergraduate (or no-credit) Credential Series in cooperation with The Registry and TEACH. The credential helps child care professionals earn the Wisconsin Professional Preschool Credential. Course topics include Foundations of Early Childhood Education; Child Development; Health, Safety and Nutrition; Guiding Children's Behavior; Art, Music and Language Arts; and Preschool Credential Capstone.

Living History/Historical Re-Enactment Education

Living History/Historical Re-Enactment Education allows students and community members to directly participate and develop an “insider’s view” of both Wisconsin and national history. Experiences available include “A Soldier’s (and Everyone Else’s) Life during the Civil War,” “Haversacks and Hoopskirts: A Civil War Living History” (held at the Lincoln Tallman House), “Battle for Prairie du Chien - Reenactment War of 1812” and “Redcoats and Cannons.”

Independent Learning

Independent Learning provides you an opportunity to take courses at your convenience. You enroll at any time, complete assignments as your schedule permits, take your exam when you are ready and, most importantly, complete the course you’ve always wanted to take or have needed for your degree. Over 300 university, high school, vocational and continuing education courses are available.

Independent Learning offers print-based courses, many with an e-mail option, through the following UW departments: Business and Economics, Engineering Professional Development, Environmental Resource Center, Professional Development and Applied Studies, Liberal Studies and the Arts and the Office of Education Outreach. We draw talent from resources throughout the entire University of Wisconsin System.

UW Learning Innovations Independent Learning is a part of the University of Wisconsin-Extension. Independent Learning has offered courses since 1892. Independent Learning’s university-level courses are developed and taught by faculty and instructors affiliated with UW institutions, accredited by the North Central Association of Colleges and Schools.

Independent Learning catalogs are available through the Office of Continuing Education, 2100 Ullsvik Hall, or you may visit their website at www.learn.wisconsin.edu/il or call their toll-free number 1.800.442.6460. Independent Learning advisors are available to answer questions regarding course selection, registration, policies and procedures.

WisLine Teleconference Service

WisLine is the easy, fast and affordable way to meet with colleagues without leaving your office or building. The conference call service operated by the University of Wisconsin-Extension has the features and lines to serve your conference call needs.

WisLine offers you these advantages:

- easy to set up and use
- availability of lines
- convenient hours
- state-of-the-art digital audio quality and performance
- service before, during and after your conference

Available to all government, educational and non-profit organizations, WisLine utilizes the state of Wisconsin’s STS system for outgoing calls, so you receive the lowest long distance rates.

For more information, contact WisLine reservations at 608.262.0753 (M-F, 8 a.m. - 4:15 p.m.) or online at www.uwex.edu/ics/wisline.

Remedial Courses in English and Mathematics

UW-Platteville entered a consortium agreement with the Southwestern Wisconsin Technical College at Fennimore, Wisconsin, whereby technical college faculty provide instruction in English and mathematics to students who are deficient in the above subject areas.

Entering new students at UW-Platteville who do not meet the minimum requirements on the UW-System English and Mathematics Placement Tests are expected to take one or both of the above classes prior to their being allowed into an entry level English or mathematics course at UW-Platteville. The courses are non-credit; therefore, they do not count toward the total number of credits needed to satisfy degree requirements at UW-Platteville.

The courses, 10 Fundamentals of English, 10 Elementary Algebra and 15 Intermediate Algebra, are taught by Fennimore faculty. Students attend the above classes on the Platteville campus as is the case with all other course work.

An entering new student must pass the UW-System English and Mathematics Placement Tests to be allowed into credit level courses in the above subjects. Students who attain low placement test
results are required to successfully complete Fundamental English, Elementary Algebra and/or Intermediate Algebra before they are allowed to register for credit level English or mathematics courses. Students must successfully complete the necessary remedial courses prior to completion of 30 credits. Students may not register for more than a total of 15 credits of academic work per term until they have satisfied their deficiencies. Questions concerning remedial course work may be directed to the Humanities Department 608.342.1826 or the Mathematics Department 608.342.1741 at UW-Platteville.

Individually Contracted Major

Coordinator: Laura Anderson
Office: 213 Warner Hall
Phone: 608.342.1117

Mission

The purpose of the Individually Contracted Major is to afford an individualized source of study to students who are unable to fulfill important educational and/or career goals via the existing majors.

Objectives

1. The student will self-assess personal, educational and occupational goals.
2. The student will review the existing major and minor programs.
3. The student will determine and demonstrate that existing majors and minors will not fulfill the student's goals.
4. The student will employ critical thinking to prepare, with the assistance of an advisor and a committee of faculty, a detailed Individually Contracted Major specifically tailored to that student's needs.
5. The student will master the course work and content of the agreed-upon major.
6. The student will develop increased self-knowledge, occupational knowledge, creativity, flexibility and organizational skill.

Students sometimes find that the selection of a major does not fit their own unique interests or career plans. Instead, their needs can best be served by an individualized course sequence composed of offerings from several departments or even from more than one college within the university. To accommodate such students, the College of Liberal Arts and Education offers the Individually Contracted Major. Students, working closely with faculty members, propose and develop a course of study that will lead to the fulfillment of their personal educational goals.

The following process sets forth the steps by which students can plan and pursue an individualized course sequence constituting the equivalent of a conventional major. At the same time, it provides a means by which the faculty can monitor students' planning and subsequent activities to ensure that they meet the standard requirements for a degree. The process culminates in an agreement which sets forth the details of the proposed major.

Step One:

Any sophomore or junior with a 3.0 or higher grade point average may select a member of the faculty of the college who is willing to be the advisor. With the advisor's assistance, the student drafts a preliminary proposal which includes four elements:

1. A justification of the projected major (including evidence both of the validity of the proposed program and of the unavailability of suitable alternatives).
2. A rationale for the program.
3. Evidence of the student's capability to conduct independent study.
4. A statement of the likely acceptability of the projected major to graduate schools or potential employers. The preliminary proposal is then presented to the coordinator.

Step Two:

The coordinator, after confirming the completeness of the proposal, may help the student bring together a suitable committee of at least three faculty members, a majority of whom are from the College of Liberal Arts and Education. One member of the committee serves as chairperson. The coordinator forwards the student's proposal to the committee chairperson for review.

Step Three:

The committee reviews the proposal, and if it is acceptable, requests that the student submit a more detailed proposal.

Step Four:

The student consults with his or her advisor and the members of the committee to develop the detailed proposal. The proposal contains a rationale and includes a complete list of courses which will be taken, the formal course descriptions and the sequencing of courses where applicable. The proposal also contains a thorough report on the acceptability of the major to employers or graduate schools, depending on the student's long term goals. The complete proposal is reviewed by the committee which can approve it, send it back for revisions or reject it.

Step Five:

The committee chairperson forwards the approved proposal to the coordinator who reviews it to make sure that college and university requirements are met. The coordinator may approve the proposal, send it back to the committee for changes or reject it. Upon the coordinator's approval, an agreement is signed between the student and the college, and information is forwarded to the appropriate offices.
The Karrmann Library is a modern learning resource center that provides a diversity of information accessible through computerized indexes to the library's collections. The collections include 272,000 books, bound periodicals and Instructional Material Laboratory printed items; over 100 subscription databases, many of which offer full-text journal articles; 90,000 government publications; 11,000 audiovisual materials; 20,000 maps; 1,000,000 microforms; and subscriptions to more than 1,200 periodicals, 60 newspapers and 1,200 other serial titles. Many more journal and newspaper titles are offered full-text online. A statewide interlibrary loan network among UW libraries supplements these materials.

The library's Web page, accessible from the main UWP page, provides access to a wide variety of electronic resources available on the Internet, including full-text articles. The library's resources can be accessed either in the library or remotely from computer labs, residence hall rooms, offices or homes. Reference service is always available on the main floor of the library or by telephone 608.342.1668 or e-mail "Ask a Librarian!" off the library homepage.

To facilitate use, this carpeted and air conditioned building contains several computer labs, a variety of study areas, reading rooms and individual carrels. In addition, the library includes audiovisual equipment including listening areas, photocopy equipment, microform readers and special collection areas. All of these resources, along with a helpful and friendly staff, reflect the library's commitment to support individual study and research.

**Library Use Instruction**

University librarians are available to provide library use instruction for any classes or to assist with any assignment-specific needs. Arrangements are made with the librarian assigned to work with a specific department.

**Distance Education Support**

The Karrmann Library provides support of information resources to faculty incorporating library components into distance learning environments and to students taking courses at a distance from UW System institutions.

The Office of Information Technology (OIT) provides for the communication and computing technology needs of the university community. Eager to assist students in the use of computing technology, OIT strongly encourages each student to make use of the excellent resources available on campus. Additionally, OIT provides computer support and troubleshooting for all faculty and staff.

**General Computer Access (GCA) Labs**

Located in the Pioneer Student Center and Karrmann Library, GCA labs are available to all students from early morning to late night during the school term. Labs make available both PC and Macintosh systems and laser printers with a variety of software for word processing, spreadsheet and database management in addition to Internet access and course-specific software. Consultants staff the labs to answer questions and provide assistance.

**Discipline Specific Labs**

Each of the three colleges and many of the academic units within each college provide computer labs with hardware and software suited to their particular disciplines. Hardware, software, scheduled availability and support are all determined by the college or department.

**Campus Wide Servers**

OIT operates VMS, NetWare, NT and LINUX servers in its core system to handle electronic mail, Local Area Network (LAN), Internet access, student accounts and administrative computing needs.

**Campus Wiring Infrastructure**

Every residence hall room and every classroom building have the wiring necessary for complete network and Internet access. ResNet, a division of Student Housing, provides support for residence hall network access.

**Internet Access**

Each student receives a computer account with a unique NetID and password that provides full electronic mail capability and access to UWP computer labs. Students may access the Internet in any lab, via wireless or through a ResNet connection.

**Help Desk**

The Help Desk 608.342.1400 or helpdesk@uwplatt.edu) is the first point of contact for faculty and staff with any computer problems, including new system installs, software and hardware purchases, computer errors, lab problems and so on. Telephone support personnel will attempt to answer most questions over the telephone. Any issues not resolved immediately are assigned to Help Desk Technicians or Computer Support Staff who provide prompt and courteous service.
Learning Technology Center  
www.uwplatt.edu/ltc

The Learning Technology Center (LTC), located in the Pioneer Student Center, provides a myriad of training and support services ranging from productivity training to assistance with online delivery of course and departmental information. Working closely with the Karrmann Library, the Office of Information Technology and Television Services, the LTC offers high quality instruction in areas of professional and technical development. Services of the LTC are available at no cost to faculty, staff and students of UW-Platteville.

Faculty/Staff/Student Training

The LTC offers training and instruction throughout the year. Training is free and covers a full range of classes, including electronic mail, word processing, spreadsheets, information resources, World Wide Web, course management systems, operating systems and multimedia. Training schedules are revised regularly to meet the information resource and technology needs of the campus community. In addition, orientations for newcomers to campus are coordinated with campus-wide orientation programs. Consult the Training and Instruction website for additional information.

Instructional Technology

The LTC promotes and supports the use of web utilities for the enhancement of on-campus course content delivery. LTC staff work directly with faculty to provide technical and instructional support for those teaching staff and faculty interested in utilizing the web or other technologies in teaching.

Computer Training Labs

The LTC has three computer labs available for training: Karrmann B6, the Testing and Assessment Lab in the Pioneer Student Center and the Hempel Collaboratory in the Pioneer Student Center. The labs can be reserved by calling 608.342.1026.

Media Technology Services  
www.uwplatt.edu/tvservices

Television Services, located in Pioneer Tower, provides a variety of services to faculty and students to support academic programs and projects. The areas of service include the following:

Video and Audio Production

Television Services offers a variety of production services such as lecture taping, video tape editing, mirror learning taping, audio and video tape duplication and audio recording.

Equipment Checkout

The department provides a variety of audiovisual equipment that may be checked out by faculty, staff and students for educational purposes. Equipment includes computer projection systems, digital cameras, video cameras, cassette decks and slide projectors.

Cable Television

Television Services provides cable service to the residence halls and provides maintenance support for the cable system.

Equipment Maintenance

A variety of maintenance services, including equipment repair, equipment recommendations and maintenance of technology enhanced classrooms, are provided by the Television Services staff.

Distance Education

The University has four facilities with the capability to transmit or receive video from a variety of sources using various technologies. For more information concerning these technologies, please call 608.342.1316 or 608.342.1628.

Satellite Feeds

Downlinks from C- or KU-band satellites may be recorded onto videotape and/or routed to a conference room on campus.
Students who are deciding on a major, who are between majors or who may be considering changing their current major have an academic advising home on campus - the office of Advising and Career Exploration Services (ACES). Undecided (“deciding”) students interested in a potential major or career field receive help in choosing classes based on their interests. ACES advisors also provide campus-wide career exploration for all students. Career planning assistance includes examining potential careers based on a student’s personality style, interests, skills, abilities and values.

The ACES office houses a Career Resource Center which holds a variety of materials to assist students with career exploration, including handouts, books and magazines. ACES also offers online career exploration. Check out our website at www.uwplatt.edu/advising for links to advising and career exploration. For more information, call 608.342.1033 or come by and visit us at 1st Floor Brigham Hall or e-mail advising@uwplatt.edu.

Athletics

Location: 134 Williams Fieldhouse
Phone: 608.342.1567

The Pioneers participate in a full range of NCAA Division III sports activities during the academic year. UWP women compete in seven intercollegiate sports: basketball, cross country, golf, soccer, softball, track and field and volleyball. Men compete in seven intercollegiate sports: baseball, basketball, cross country, football, soccer, track and field and wrestling. Platteville is a member institution of the Wisconsin Intercollegiate Athletic Conference (WIAC).

Up-to-date Pioneer information can be found at www.uwplatt.edu/athletics.

Career Center

Location: Ullsvik Center
Phone: 608.342.1183

The office provides literature (handouts, books and magazines) on job seeking topics. The Employer Information Library includes current literature, employer directories, corporate videos and company CDs to help students prepare for job search and interviews. An annual report is published which includes salary surveys and placement information on recent UWP grads by major.

Workshops are scheduled each semester on topics such as resumes/cover letters, interviewing skills, job search and dinner etiquette. Students receive individual, one-on-one assistance with writing resumes and cover letters. Opportunities for full-time work, internships, co-ops or summer jobs are made available to students through our Fall and Spring Employer Fairs and web based recruiting software.

We invite and encourage all students to utilize our services and visit us at www.uwplatt.edu/careercenter.

Center for the Arts

Location: Center for the Arts
Phone: 608.342.1298

The Center for the Arts (CFA) provides a professional performing arts environment for the campus and community to experience the arts through classroom learning and quality cultural and performing arts performances.

The Center for the Arts hosts more than 150 fine arts events during the year including music theater, dance, drama, children’s theater productions, orchestra concerts, choral performances, jazz bands, student recitals, the Performing Arts Series and the Heartland Festival.

The facility includes a 565 seat Brodbeck Concert Hall, a 210 seat theater, box office, instrumental and vocal classrooms, dressing rooms and scene and costume shops. Student and university organizations, university departments, as well as off campus groups may reserve the Center for the Arts for fine art programming. To reserve the facility, contact the Reservations Office at 608.342.1451 or stop by the Pioneer Student Center Administration Office. To request more information, purchase tickets or to have your name added to the Center for the Arts event mailing list, call the CFA at 608.342.1298. More information and policies can be found at www.uwplatt.edu/cfa. The CFA is always looking for volunteer ushers. To see a list of shows available, stop by the University Box Office in the lobby of the CFA.

Children’s Center

Phone: 608.342.1260

The University's Children's Center provides excellent child care services and educational experiences for the children of UW-Platteville students and employees. To be eligible for the reduced student rate, a parent must be registered for at least six credits as an undergraduate student during the academic year or for three credits during the summer session. Graduate students must carry at least five graduate credits.

The Children's Center operates weekdays from 7:30 a.m. - 5 p.m. during the academic year, interim periods and summer session. Children must be between two and seven years of age to enroll.

Lead teachers who hold a degree in the field of early childhood education staff the Center classrooms. College students seeking degrees primarily in education or psychology assist the classroom teachers. The Children's Center also serves as a laboratory and research site for students learning about child development and early childhood practices. Located in their own facility north of Doudna Hall, the Children's Center is a state licensed program. For further information, visit us at www.uwplatt.edu/childrenc.
Counseling Services

Location: 220 Royce
Phone: 608.342.1865

Professional counselors provide free, confidential personal and academic counseling to enrolled students. Services are directed toward helping students develop competence and confidence, manage emotions, enhance relationships, make decisions and improve coping skills as they strive to meet their educational goals and achieve personal growth. Areas of assistance cover emotional and social concerns, career assessment and decision-making, study skill development, stress management, depression and anxiety and related issues. Tests and inventories are also available to facilitate the counseling process.

Counseling Services also maintains an Alcohol and Other Drug Education Program, which offers information, counseling, outreach and referral services related to the use and abuse of alcohol and other drugs.

In addition, standardized tests such as the PPST; GRE; Placement exams for Math, English and Foreign Language, CLEP and MAT are administered through Counseling Services’ Academic Testing Program. Visit us at www.uwplatt.edu/counseling.

Dining Services

Location: Glenview Commons
Phone: 608.342.1778

A variety of food, beverage and nutritional services are provided at UW-Platteville. Dining Services provides a number of meal plan options for residence hall students and for commuter students. In addition, students may add cash to their meal plan for extra purchasing flexibility at all dining locations.

Glenview Commons is the main dining service area on campus and features an “all-you-can-eat” menu with planned, special meals featuring new cuisine items and ethnic foods. Glenview Commons also houses a convenience store where students may purchase snacks and sundry items.

The Pioneer Student Center is home to several dining service areas. Pioneer Crossing features a sub shop, grill, Asian, Mexican, traditional foods along with a full salad and soup bar. Pioneer Perk is home to grab and go and a full coffee bar. And the Pioneer Haus is a pizza and recreation area. For further information, call us or visit us at http://reslife.saf.uwplatt.edu/diningservices.

Greek Life

Location: Pioneer Involvement Center, Pioneer Student Center
Phone: 608.342.1075

Joining a fraternity or sorority is a great way to enhance the collegiate experience by providing opportunities to develop important academic and leadership skills as well as a strong sense of belonging. All Greek organizations were founded on the principle of brotherhood and sisterhood and nurturing positive personal development.

Greek Life staff is dedicated to assisting in creating a positive living, learning and governing environment for students interested in Greek Life. The focus is on scholarship/academic achievement; membership recruitment and development; chapter development/operations; campus, community and university relations; social event responsibility; judicial operations; leadership and ethical development; along with community service and philanthropic opportunities. For more information stop by the Pioneer Involvement Center or visit our website at www.uwplatt.edu/pic.

Student Health Services

Location: 2nd floor, Royce Hall
Phone: 608.342.1891

The UW-Platteville Student Health Services provides a broad range of primary health care services to the campus community. These include acute care for illness and emergencies, health and wellness promotion, and opportunities for students to participate actively in their own health care. Most health care services are available at no charge to all UW-Platteville students carrying three or more credits per semester. Students are responsible for those expenses incurred outside the Student Health Services (such as consultations with private physicians, referrals for specialty care if needed, x-rays, prescribed medications and some laboratory work). A directory of medical services provided on campus and in the community is available at the Student Health Services office. Physicians, nurse practitioners and registered nurses provide care to students. Student Health Services, located on the second floor of Royce Hall, is open Monday through Friday from 7:45 a.m. to 4:15 p.m. Students may call 608.342.1891 to schedule an appointment or to obtain additional information.

It is expected that entering students will have a pre-admission physical exam. Students are also expected to complete the Student Health Services health history form and provide a record of immunizations. The Student Health Services informational brochure and the pre-entrance health history form are provided to students after their admission to the university.

A student health insurance plan providing hospital, surgical, outpatient and major medical coverage is available at a reasonable cost to students. Students are strongly encouraged to obtain health insurance if they are not already covered by personal or family plans. Information concerning the student group insurance plan is available on campus and is available to all registered students each fall. Enrollment details are available during registration or from Student Health Services.
Intramurals
Location: 134 Williams Fieldhouse
Phone: 608.342.1568

Intramurals provide the campus community with the opportunity to compete regularly in organized sports for recreation. There are three kinds of intramurals: Women’s, Men’s and Co-ed Sports (individual and team). Women’s sports include indoor soccer, broomball, football, badminton, basketball, racquetball, tennis and volleyball. Men’s sports include badminton, basketball, broomball, football, racquetball, indoor soccer, softball, tennis, volleyball and water polo. Co-ed sports include badminton, indoor soccer, softball, tennis, volleyball, water polo and football. Leagues are available for all students of all abilities. For more information, visit www.uwplatt.edu/intramurals.

Math Learning Center
Location: 360 Gardner Hall
Phone: 608.342.1948

The Math Learning Center provides tutoring for students enrolled in math courses numbered 2740 and below. In addition, some tutors can assist with problems in chemistry and physics. Semester schedules are posted outside the center and include daytime and evening hours.

Multicultural Educational Resource Center (MERC)
Location: 129 Warner Hall
Phone: 608.342.1555

The purpose of the Multicultural Educational Resource Center is to promote a university environment that is conducive to the recruitment, retention and graduation of minority and disadvantaged students. Though the emphasis is on “students of color,” the Multicultural Educational Resource Center is available to the university and tri-state community. Educational goals include the promotion of higher retention rates, measurement of academic achievement and graduation. Counseling is available in the areas of academic, personal and social concerns. The Multicultural Educational Resource Center facilitates interaction of persons of diverse cultural, ethnic and racial origins with other constituencies of the university community. The Multicultural Educational Resource Center encourages diverse cultural programming by the Campus Programming and Relations (CPR) and provides assistance for student organizations, including ASIA Club, Black Student Union, Hmong Club, Student Organization of LATINOS and Intertribal Council. The office is open Monday through Friday from 7:45 a.m. to 4:15 p.m. Feel free to walk-in and speak with an advisor or call with any questions or concerns. For more information, visit www.uwplatt.edu/merc.

Harry and Laura Nohr Gallery
Location: Ullsvik Center
Phone: 608.342.1398

Located in the Ullsvik Center, the Harry and Laura Nohr Gallery provides students the opportunity to see and experience art works created by students and professional artists of regional and national renown.

The Nohr Gallery Advisory Board Art Committee reviews work and recommends artists working in a variety of media including painting, sculpture, drawing, printmaking and various crafts for exhibition during the academic year. The gallery is the ideal spot for students to browse during free time. For additional information, visit www.uwplatt.edu/arts/nohr.

Performing Arts Series
Location: CFA Box Office
Phone: 608.342.1298

The CPR Performing Arts Series sponsors an annual series of outstanding professional fine arts events from symphony orchestras to musical theater. The performances are chosen and scheduled by a committee of students, faculty and staff. Past performances have included the The Russian State Chorus, The Three Irish Tenors, Corky Siegel’s Chamber Blues featuring Randy Sabien and The Lily Cai Chinese Dance Company. For ticket information, contact the Center for the Arts Box Office at 608.342.1298.

Pioneer Activity Center (PAC)
Location: 134 Williams Fieldhouse
Phone: 608.342.1568

The University of Wisconsin-Platteville extends a warm welcome to all potential members of the Pioneer Activity Center (PAC). The PAC allows students, faculty/staff and general public to further their wellness/physical activities at a minimal cost. Membership rates for the year, semester or summer make lifetime conditioning programs available at your convenience. Whether it is walking our 200-meter oval track, swimming in our pool, playing basketball, volleyball, tennis or lifting in our diversified Fitness Center (free weights, Universal, Nautilus, Hammer Strength machines, Stairmaster, treadmills and aerobic Start Trac bicycles), members will find facilities to accommodate all. The opening of the Pioneers Activity Center has enabled the university to double free-time recreation, intramural and instructional opportunities for students. It has also enabled us to offer memberships to the faculty/staff and general public. It is our hope that a PAC membership will be your first step to your continued physical fitness program. For more information on membership costs and facility hours, contact the Pioneer Activity Center director or visit the PAC website at www.uwplatt.edu/pac.
The Pioneer Involvement Center’s mission is to create collaborative, cocurricular programs, events and processes supporting student leadership and involvement opportunities contributing to student retention and encouraging diversity.

Pioneer Involvement is composed of several functional areas that offer programs, services and resources for students to get involved. Student Organization Development focuses on strengthening student organizations. Cocurricular Programming strives to provide intentional programs and entertainment that has educational value. Greek Life focuses on promoting a positive learning environment for students wanting to gain leadership skills in a living community with shared values and principles. Leadership Development and Involvement Opportunities strive to connect students to experiential learning and enhance leadership skill development. New student orientation and first year experience develop opportunities for new students to feel connected to UWP and know how to access resources to succeed. Design Services and Support Service areas assist with promotion of events, and we take pride in connecting you with the correct information or the right resource. Stop by the Pioneer Involvement Center which is located in the Pioneer Student Center or telephone 342-1075. You can also visit the Pioneer Involvement Center website at www.uwplatt.edu/pic.

Pioneer Student Center
Location: Pioneer Student Center
Phone: 608.342.1075

Located at the crossroads of campus in the center of the academic community, the Pioneer Student Center opened on April 1, 2002. More than just a building, the Pioneer Student Center is the community center for the campus of UWP. Incorporating the concepts of a technologically rich environment with both formal and informal events for students, faculty, staff and visitors, and the traditional, social aspects of a student center, the Pioneer Student Center encourages the convergence of academic and social lives to promote learning that goes beyond the classroom.

Contained within the 96,000 sq. ft. facility are a variety of services and programs designed to enhance the learning environment and strengthen the UWP community. Nearly 200 computer workstations are placed throughout the Pioneer Student Center in a wide variety of settings, from highly structured environments to informal lounges. Over 100 computers are housed in the Bears Den computer lab, while approximately 20 computers are available in the Pioneer Involvement Center. Lounges support data ports and laptop computers can be checked out and used anywhere in the facility.

The Pioneer Crossing, Pioneer Haus and Pioneer Perk offer patrons an array of food and beverage selections to enjoy while attending events, or just relaxing in the Pioneer Student Center. Events in the Pioneer Student Center range from live music to comedians, from leadership conferences and organizational meetings to educational speakers, and from surfing the web to watching the eight foot screen television in the Pioneer Haus. Events are sponsored by the over 170 student organizations supported through the office space, common lounges and accessible technology offered in the Pioneer Student Center. Other student center services include the University Bookstore, Office of Campus Life and the Information Center.

Cultivating enduring loyalty to the campus community, the Pioneer Student Center exhibits the heritage of the UWP campus. The Alumni Lounge is home to the UWP Alumni Wall of Fame, featuring the recipients of the Outstanding Recent Alumni and the Distinguished Alumni awards. From the Alumni Lounge and Heritage Hall, community members can view the Normal School bell, refurbished for the Pioneer Student Center as a commemoration of the rich campus traditions. The University Seal hangs in the windows of Heritage Hall where flags representing the nationalities of every student in attendance at UWP are proudly displayed to celebrate our cultural diversity.

Office of Rental Issues
Location: Pioneer Student Center
Phone: 608.342.1102

The Office of Rental Issues is a resource created by the University of Wisconsin-Platteville Student Senate and sponsored by the Pioneer Student Center. This office maintains a current list of available housing in Platteville and the immediate area and has up-to-date information on State laws regarding tenant-landlord disputes. The mission of the Office of Rental Issues is to provide services to help students with off-campus housing related concerns. Through Student Senate and the Pioneer Student Center, the Rental Issues Coordinator acts to promote positive relations between UWP students, landlords and the City of Platteville. For further information, visit us at http://reslife.saf.uwplatt.edu/ri and click Rental Issues.

Residence Halls
Location: 1st floor Royce Hall
Phone: 608.342.1845

Living on campus in one of the nine residence halls will provide you with special opportunities for growth, learning, fun and friendship. Residence hall living is an integral part of the college experience. Sharing a portion of our mission statement can summarize the primary purpose of the residence halls. Student life at UW-Platteville strives to create an environment that supports individual choice, develops a sense of community and emphasizes individual and group responsibility. Each hall is a small community of approximately 240-320 residents, with a total residence hall population of over 2,300 students. Halls are conveniently located, computer networked and well maintained. Full-time, professional hall directors live in each hall and are supported by student resident assistants who reside on each wing or floor. Staff members in each building are carefully selected, specially trained and willing to help students have a successful campus living experience. Residents with personal computers that meet or exceed the minimum computer configuration specifications have direct access to computing resources from within their individual room. Computer labs in each residence hall are also available 24 hours a day. See http://reslife.saf.uwplatt.edu/resnet for detailed information.

A unifying link within the residence hall community is the Residence Hall Council (RHC). Students elected to serve as representatives of this governance body promote an interest in and understanding of the campus environment and serve as a general forum for improving residence hall life.
UW-Platteville has a residence hall requirement that derives from a University of Wisconsin Board of Regents' policy that requires freshmen and sophomore students to live in university residence halls during the academic year unless they qualify for an exception and are officially released by the Office of Student Housing. After being admitted to the university, students receive an application for residence halls (rental agreement) and a letter and form explaining the procedure to request an exception to the residency requirement. This residency requirement is stringently enforced, and students must provide the information necessary to confirm their compliance with it. Please direct any questions to the Office of Student Housing. For further information, please call or visit our website at http://reslife.saf.uwplatt.edu/housing. The toll free number is 866.864.7647 and Fax is 608.342.1847.

Services for Students with Disabilities

Location: 103 Warner Hall
Phone: 608.342.1818 (Voice and TTY)

Services for Students with Disabilities works to ensure that no qualified student, solely by reason of disability, be denied access to, participation in or the benefits of, any academic program or activity offered by the university. The office provides:
• Information about university services to potential and present UW-Platteville students with disabilities.
• Assistance in obtaining reasonable academic accommodations and/or auxiliary aids.
• Assistance in obtaining access to academic services, programs, activities and facilities.
• Referral to appropriate sources for non-academic accommodations.
• Advocacy for campus and community needs.
• Technical assistance to university departments, assisting in identifying accommodations and providing services and responses on a case by case basis.

To arrange academic accommodations, students with disabilities must request reasonable accommodations; provide the Office of Services for Students with Disabilities with sufficient, current disability-related documentation from an appropriate licensed professional; and describe the impact of their disability in an academic setting. The Services for Students with Disabilities office reviews disability documentation and verifies that the documentation satisfies disability verification guidelines. The student meets with the SSWD staff for an intake to determine reasonable academic accommodations. At the conclusion of the intake process, students receive a VISA and information about how to implement each of the recommended academic accommodations. It is then the responsibility of the student to meet with each course instructor to discuss the accommodation recommendations. Students are expected to engage in appropriate and responsible levels of self-advocacy in obtaining and arranging for accommodations or auxiliary aids. There is no cost to students for assistance provided by Services for Students with Disabilities. Visit us at www.uwplatt.edu/disability.

Student Organization Development

Location: Pioneer Involvement Center, Pioneer Student Center
Phone: 608.342.1075

One of the many ways to “get connected” at UWP is by joining one of the 170 plus registered student organizations whose members have interests similar to your own. It takes only ten enthusiastic students and a faculty advisor to create an organization. Visit our website at www.uwplatt.edu/pic to obtain an updated student organization directory or stop by the Pioneer Involvement Center in the Pioneer Student Center or call 608.342.1075.

Being a member of a student organization provides an opportunity for you to develop leadership and communication skills. The enjoyment of collaborating and achieving goals, as well as the interpersonal connections made possible by forming a group, create one of the most valuable experiences that you will have at UWP!

The Pioneer Involvement Center houses several student governance organizations on campus. Details about the following UWP governance groups are available on the Pioneer Involvement webpage:
• Student Senate
• Residence Hall Council (RHC)
• Segregated University Fee Allocation Commission (SUFAC)
• Student Center Advisory Committee (SCAC)
• Presidents Council

Student Support Services

Location: 105 Warner Hall
Phone: 608.342.1816

Participation in programs offered by Student Support Services is limited to students who meet qualifying criteria. The U.S. Department of Education, which funds this program, requires that each participant be in at least one of the following three categories: 1) first-generation college students (neither parent has a four-year college degree); 2) income eligible students (based on taxable income); or 3) students with disabilities.

Student Support Services provides assistance to students who may need extra help or have not had appropriate preparation necessary to succeed in the university. Student Support Services provides students with:
• Tutoring in most 1000 and 2000 level courses, and selected 3000-4000 level courses.
• Workshops on reading, study skills, algebra skills, computational skills, pre-computer and word processing.
• Counseling/advising in academic issues, personal concerns and career planning matters.
• A Learning Disability Specialist for individualized assistance with learning styles and study skills, support/advocacy and progress monitoring.

These services are available at no charge. Students develop their own program with the assistance of a staff member. All sessions are arranged around a student’s work and class schedule. Visit us at www.uwplatt.edu/stusuppserv.
Technical and Event Services
Location: Pioneer Student Center
Phone: 608.342.1230

Technical Services provides professional support for events in the Ullsvik Center, Center for the Arts and Pioneer Student Center as well as ceremonies, major events and university sponsored events held throughout campus. Services and equipment include audio, visual, lighting, sound reinforcement, staging, etc. To arrange for production, support or find out more about equipment availability, contact Technical Services or stop by the Administrative Office of the Pioneer Student Center.

Textbook Center
Location: 31 Doudna Hall
Phone: 608.342.1265

Required textbooks are rented at the Textbook Center. Textbook rental fees are part of the segregated fees paid by students.

The Textbook Center aids students by furnishing texts in a cost-efficient manner. This provides students a more affordable avenue of textbook acquisition than that of buying texts for each course.

However, students may purchase their textbooks. Active textbooks are offered for sale to currently enrolled students year-round, excluding the months of September and January and Finals Week in December. All books purchased during sale times are discounted.

Students are able to use the Textbook Center as a resource center after the first three weeks of classes. For more information, visit us at www.uwplatt.edu/textbookctr.

Patricia A. Doyle Women’s Center
Location: 136 Warner Hall
Phone: 608.342.1453

The Patricia A. Doyle Women’s Center serves as UW-Platteville’s central contact for resources and support for women on campus. The Women’s Center is committed to creating an environment where women receive equal opportunities and are empowered to utilize their talents and efforts to their fullest extent. Our center provides all students, faculty and staff with resources related to women’s issues such as books, magazines, journals and videos. The Center seeks to honor the contributions and experiences of women of all ages, classes, physical conditions, sexual identities, spiritual beliefs and ethnic origins. Programming, fostering connections, providing resources and advocating for equitable situations for women are the Women's Center's main activities. For more information, visit us at www.uwplatt.edu/womensctr or e-mail womensctr@uwplatt.edu.

Writing and Tutoring Resource (WATR) Center
Location: 320 Brigham Hall
Phone: 608.342.1615

The Writing and Tutoring Resource Center is home to University Tutoring Services and the Writing Center.

University Tutoring Services
Location: 302 Brigham Hall
Phone: 608.342.1615

University Tutoring Services offers tutoring to the entire student body for a wide variety of courses. There are no conditions necessary to obtain a tutor other than the desire to improve in a specific subject matter. Services are available to any student, for a minimal fee, regardless of skill level or grade point average. Following the assignment of a tutor, it is the responsibility of the student seeking tutoring to make contact with the designated tutor as soon as possible to arrange the first session. Fees for tutoring services are per hour and billed two to three times per semester. Students are limited to six hours per week of tutoring.

Tutors are UW-Platteville students who have received an A or a B or tested out of the course they are tutoring.

Writing Center
Location: 303 Brigham Hall
Phone: 608.342.1615

The Writing Center offers free tutoring to all UW-Platteville students. The goal is to help students become better writers by learning to more effectively read and revise their own writing. In half-hour sessions, students meet one-on-one with peer tutors to discuss any kind of writing, from freshman composition papers to upper level research papers, lab reports, cover letters, and anything in between. The Writing Center also has a small computer lab and reference materials available for student use during hours of operation, currently Monday through Thursday, 9 a.m. to 5 p.m. and Friday, 9 a.m. to 4 p.m. It may be possible to work with someone outside of normal operating hours if a tutor is available. Drop-ins are welcome.
The College of Business, Industry, Life Science and Agriculture (BILSA) offers degree programs in agriculture, biology, business and accounting, communication technologies and industrial studies. With its emphasis on both theoretical and applied knowledge, the college is committed to educational excellence within a diverse learning community. As a resource center, BILSA promotes cooperative interactions with organizations in the public and private sectors.

Our faculty believe in assisting students to become lifelong learners, develop clear thinking, and possess a healthy curiosity. Students are encouraged to diligently pursue intellectually stimulating activities beyond those typically taught in the academic classroom. Courses in humanities, communications, sciences and mathematics are required of all majors, to help prepare them to enter a rapidly changing and increasingly international workforce. Required core courses in each major ensure the breadth of technical, analytical, scientific and business knowledge and skills necessary for future success. Finally, students’ upper-level study in majors, minors or emphasis areas provides in-depth study in a particular field of specialization.

Professional Programs

The College of Business, Industry, Life Science and Agriculture provides professional programs of study for students seeking to enter careers in a wide variety of fields. Demand for graduates of all programs offered within the college is exceptional. People who graduate from the college can seek careers in both private and public entities, along with being able to pursue continued education in graduate or professional programs.

Internship Opportunities

Most programs within the college offer the opportunity for internships, which are supervised, applied experiences related to the program of study. Students can earn academic credits while earning a salary in these programs. Many opportunities exist for this experience. Faculty work closely to assist students in gaining the best experience which will enhance employment opportunities upon graduation. Employers speak very highly of the college’s internship program.

Extracurricular Activities

The college strongly believes that students should have an opportunity to participate in a wide variety of activities associated with their major studies. Over 35 student clubs and organizations are available within the college to allow students to gain experiences within their area of interest. These organizations work cooperatively with the departments/schools to incorporate activities which will broaden the students’ educational experiences.

International Education

Many social science and humanities courses which can fulfill program requirements are available through UW-Platteville’s Study Abroad Programs in Australia, China, England, Fiji, Italy, Japan, Spain and others. In selected majors, BILSA has one-to-one student exchange programs in partnership with universities in the Netherlands and Ireland.

Alternate Delivery Methods

BILSA offers a print-based and online degree program in business administration for students unable to attend on-campus classes. This program allows participants the opportunity to obtain their entire college degree without leaving their geographic location. For more information about this program, refer to the Department of Business Administration.
**SCHOOL OF AGRICULTURE**

www.uwplatt.edu/soa

**Director:** Michael C. Compton  
**Office:** 219 Pioneer Tower  
**Phone:** 608.342.1393  
**E-mail:** soa@uwplatt.edu

**Professors:**  
Kevin Bernhardt  
Michael Compton  
Michael O. Mee  
Susan G. Price  
Mark Zidon

**Associate Professors:**  
Christopher Baxter  
Richard Bockhop  
Thomas Hunt  
Annie Kinwa-Muzinga  
Rami Reddy  
John Tembei

**Assistant Professors:**  
Kris Mahoney  
Denise McNamara  
Charles Steiner

**Academic Staff:**  
Dennis Busch  
Dawn Lee  
Jodi McDermott  
Randy Mentz  
Alicia Prill-Adams  
Cory Weigel  
Phil Wyse

**Academic Department Associates:**  
Sharon Pete  
Sandy Mester

**MAJORS**

**Agribusiness Major:**  
- Commodity and Price Analysis Emphasis  
- Communications and Marketing Emphasis  
- Comprehensive Emphasis  
- Engineering Technology Emphasis  
- International Emphasis  
- Management Emphasis

**Agricultural Education Major:**  
- Comprehensive Emphasis  
- Agricultural Education and Technology Education Emphasis  
- Agribusiness (Non-Teaching) Emphasis

**Animal Science Major:**  
- Agribusiness Emphasis  
- Dairy Emphasis  
- International Emphasis  
- Meat and Livestock Emphasis  
- Science Emphasis

**Ornamental Horticulture Major:**  
- Breeding and Genetics Emphasis  
- Business and Marketing Emphasis  
- International Emphasis  
- Professional Landscape Management Emphasis

**Reclamation, Environment and Conservation Major:**  
- Biological Emphasis  
- Chemistry Emphasis  
- Physical Emphasis

**Soil and Crop Science Major:**  
- Agribusiness Emphasis  
- Comprehensive Emphasis  
- International Emphasis  
- Plant Breeding and Genetics Emphasis

**MINORS**  
- Agribusiness  
- Animal Science  
- Biotechnology  
- Ornamental Horticulture  
- Soil and Crop Science

**PRE-PROFESSIONAL PROGRAMS**  
- Pre-Veterinary Medicine

**School of Agriculture Vision**

The School of Agriculture at the University of Wisconsin-Platteville strives to be one of the best agricultural programs in the upper Midwest.

Graduates of the School of Agriculture will be recognized for their theoretical knowledge and its practical application in the field of agriculture. Our graduates will also be known for their ability to effectively communicate, diagnose and solve problems, think creatively, be active leaders in agriculture and their community, understand the global nature of agriculture and embrace people of diverse cultures. Upon graduation, they will be prepared to serve the agricultural industry through immediate employment and career development.

Faculty and staff in the School of Agriculture will be leaders in serving students and society through teaching, research and service.

**Basic Values**

The School of Agriculture endorses the values outlined by the University of Wisconsin-Platteville. In addition, the School of Agriculture is guided by the following values:

- High quality educational programs that prepare students for careers in agriculture;  
- Excellence in students’ knowledge of agriculture, their communication skills, problem-solving skills, global awareness, diversity awareness, work experience and leadership skills;  
- Connection with students before, during and after their undergraduate experience at UW-Platteville;
• Excellence and current knowledge in faculty and staff;
• Theoretical and practical experiences for students;
• Research as a component of the School of Agriculture and the faculty, staff and student experiences; and
• Service to the community, the state of Wisconsin and society.

Programs of Study

Students in the School of Agriculture may choose from six possible majors: agribusiness; agricultural education; animal science; ornamental horticulture; reclamation, environment and conservation; and soil and crop science. Emphases are available within each program that allow students to specialize their program of study, and an international emphasis is available in agribusiness, animal science, ornamental horticulture and soil and crop science for students that desire to extend their education beyond U.S. borders. Available minors include agribusiness, animal science, biotechnology, ornamental horticulture and soil and crop science. Specific details about these programs are provided with the description of individual majors. Students interested in veterinary medicine may enroll in the pre-veterinary medicine program.

Facilities

Classroom instruction within the field of agriculture requires experimentation, observation and practical application of scientific information. Students majoring in agriculture use classroom laboratories and our 430-acre laboratory and demonstration farm (Pioneer Farm) for their course work. All students have the opportunity to observe and apply approved management practices in animal science; feed processing and storage; farm power and machinery; and crops, soils and water conservation. In classroom laboratories, students learn modern applications of biotechnology, computer technology and engineering technology.

At Pioneer Farm, our activities are centered on a systems approach toward sustainable agriculture. Our livestock program includes dairy cattle, beef cattle and swine. Experimental plots of Midwest cereal grains and forage crops, weed control and agronomic practices are planned and implemented by students as part of their course work. Global positioning systems (precision farming) are used for field crops. Agricultural field machinery and farmstead equipment are available for observation, test and analysis. Opportunities for applied research are also available at Pioneer Farm.

The Pioneer Greenhouse and Gardens Complex consist of a 6,000 square foot, high-technology greenhouse range and 25,000 square foot demonstration garden. A classroom equipped with 25 student workstations is located in Pioneer Greenhouse. Pioneer Gardens is an outdoor laboratory composed of ten theme garden areas that are primarily used by students majoring in ornamental horticulture.

Internship Program

The School of Agriculture internship program offers students an opportunity to experience a career firsthand while earning college credit. Internships are available in all areas of agriculture, including plant and animal breeding, soil conservation, farm equipment and machinery, food processing and canning, farm supply and service, agricultural credit, agricultural engineering, marketing and business management, federal crop insurance, statistical reporting services, plant and animal nutrition, greenhouse and nursery production, landscape design and management, public and private ornamental horticulture and farm management. Student internships are obtained by contacting individual businesses and submitting an internship application to the School of Agriculture Internship Coordinator. Students must register for the Agribusiness Internship Course (AGINDUS 4580) and satisfactorily complete the program requirements to receive college credit. Students majoring in agribusiness, ornamental horticulture and soil and crop science are required to complete at least one, 3-credit internship before graduation.

School of Agriculture Organizations

All students are encouraged to participate in extracurricular activities such as athletics, music, art, drama, judging teams and student clubs, organizations and fraternities or sororities. The School of Agriculture supports 18 campus clubs and student organizations as well as competitive judging teams that represent all of our disciplines. These organizations provide practical learning experiences as well as a means to meet people and improve communication and leadership skills.

General Requirements

Bachelor of Science Degree

<table>
<thead>
<tr>
<th>Total for Graduation</th>
<th>120 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>44-53 credits</td>
</tr>
<tr>
<td>School of Agriculture Core Curriculum</td>
<td>12 credits</td>
</tr>
<tr>
<td>Major Studies</td>
<td>36-60 credits</td>
</tr>
<tr>
<td>Minor Studies</td>
<td>24 credits</td>
</tr>
</tbody>
</table>

School of Agriculture Core Curriculum (12 Credits)

Students majoring in agribusiness, agricultural education, animal science and soil and crop science must satisfactorily complete the following School of Agriculture core courses:

- AGINDUS 1500 Introduction to Agribusiness 3 cr
- AGINDUS 1750 Equipment, Structures and Power Systems 3 cr
- AGSCI 1000 Introduction to Animal Science 3 cr
- AGSCI 1240 The Plant-Soil Environment 3 cr

General Education...44-53 credits
Mission of the Agribusiness Program

Wisconsin’s agricultural industry of production, processing, distribution, retail and services generates $84 plus billion in annual state revenue per year, making it the largest industry in Wisconsin. Wisconsin’s agricultural industry means jobs; 22 percent of the workforce relies directly on agriculture. The same story can be told in the surrounding regional states of Iowa, Illinois and Minnesota. With job placement near 100 percent, the baccalaureate degree program in agribusiness is a direct feed into the number one industry of the state and region - Agriculture.

The purpose and obligation of the Agribusiness program and faculty are to serve students, parents of students, employers and citizens by turning out students who excel in their preparedness and capacity to compete for desired careers in the agribusiness industry, and be successful at accomplishing both business and personal goals. This will be accomplished through the learning and application of business, economic and agricultural science theories, tools and processes, and through the development of the “whole” student via the university’s general education requirements.

The agribusiness program’s curriculum structure includes core courses required to be taken by all students. In addition students must choose either a minor or one of the following Agribusiness Areas of Emphasis:

- Commodity and Price Analysis
- Communications and Marketing
- Management
- Agricultural Engineering Technology
- Comprehensive Program of Study

Student Learning Outcomes

Students will gain knowledge, comprehend, apply, analyze, synthesize and/or evaluate, as appropriate, principles, tools and processes in the following overall areas:

1. Agribusiness Management Principles
2. Economic Principles and Concepts
3. Financial Analysis and Record-Keeping
4. Agricultural Science
5. Mathematical and Quantitative Tools of Agribusiness Management and Analysis
6. Commodity and Identity-Based Marketing
7. Oral and Written Communication Skills
8. Professional and Personal Development
9. Experiential - Crash Site - Learning
10. Working understanding of the current status and trends in the local and global structure of the agriculture and food system.

Specific student learning outcomes for each of the overall areas is available upon request from the director of the program.

Agribusiness Major with Minor

Required Core SOA Courses (12 credits):

- AGINDUS 1500 Introduction to Agribusiness 3 cr
- AGINDUS 1750 Equipment, Structure and Power Systems 3 cr
- AGSCI 1000 Introduction to Animal Science 3 cr
- AGSCI 1240 The Plant-Soil Environment 3 cr

Required Agribusiness Courses (32 credits):

- ACCTING 2010 Financial Accounting 3 cr
- ACCTING 2020 Managerial Accounting 3 cr
- AGINDUS 2430 Agricultural Marketing 3 cr
- AGINDUS 2450 Agribusiness Professional Development I 1 cr
- AGINDUS 3410 Agricultural Consulting and Sales 3 cr
- AGINDUS 3430 Quantitative Methods in Agribusiness 3 cr
- AGINDUS 3450 Agribusiness Professional Development II 1 cr
- AGINDUS 4500 Agribusiness Management 3 cr
- AGINDUS 4580 Agribusiness Internship 3 cr
- COMMNCTN 3010 Business Communications 3 cr
- MATH 1830 Elementary Statistics 3 cr
- ECONOMIC 2230 Principles of Microeconomics 3 cr

AGINDUS 1500 Introduction to Agribusiness will count within the Agribusiness major. For students in the Engineering Technology Emphasis, AGINDUS 1750 Equipment, Structure and Power Systems will count toward the Agribusiness major.

Electives (12 credits):
Electives can be any course chosen by the student and approved by the advisor.

Minor (24 credits):
Select a 24 credit university minor to complete the degree.

Agribusiness Comprehensive Major

Course work includes completion of required core and an emphasis area.

Required Core SOA Courses (12 credits):

- AGINDUS 1500 Introduction to Agribusiness 3 cr
- AGINDUS 1750 Equipment, Structure and Power Systems 3 cr
- AGSCI 1000 Introduction to Animal Science 3 cr
- AGSCI 1240 The Plant-Soil Environment 3 cr

Required Agribusiness Courses (32 credits):

- MATH 1830 Elementary Statistics 3 cr
- ECONOMIC 2230 Principles of Microeconomics 3 cr
- ACCTING 2010 Financial Accounting 3 cr
- ACCTING 2020 Managerial Accounting 3 cr
- AGINDUS 2430 Agricultural Marketing 3 cr
- AGINDUS 2450 Agribusiness Professional Development I 1 cr
- AGINDUS 3410 Agricultural Consulting and Sales 3 cr
- AGINDUS 3450 Agribusiness Professional Development II 1 cr
- AGINDUS 4500 Agribusiness Management 3 cr

Specific student learning outcomes for each of the overall areas is available upon request from the director of the program.
Commodity and Price Analysis Emphasis (34 credits)

**Required Courses (17 credits):**

- AGINDUS 3500 Agricultural Prices 3 cr
- AGINDUS 3530 Agricultural Commodity Marketing 3 cr
- AGINDUS 4330 Agribusiness Marketing Management 3 cr
- AGINDUS 4440 Livestock and Meat Marketing 3 cr
- AGINDUS 4620 Agricultural Commodity Price Forecasting 3 cr

Select 3 credits from Agricultural Sciences, Agricultural Engineering Technology or Reclamation.

**Electives (17 credits):**

Select electives in consultation with advisor.

Management Emphasis (34 credits)

**Required Courses (19 credits):**

- AGINDUS 3420 Agricultural Finance 3 cr
- AGINDUS 3460 Farm Management 3 cr
- BUSADMIN 3530 Organizational Behavior 3 cr
- AGINDUS 4330 Agribusiness Marketing Management 3 cr

Select 3 credits from Agricultural Sciences, Agricultural Engineering Technology or Reclamation.

**Select one of the following (3 credits):**

- AGINDUS 2500 Producer and Consumer Cooperatives 3 cr
- AGINDUS 3520 Agricultural Law 3 cr
- AGINDUS 3500 Agricultural Prices 3 cr
- AGINDUS 4460 Agricultural Policy 3 cr

**Electives (15 credits):**

Select in consultation with advisor.

Communication and Marketing Emphasis (30 credits)

**Required Courses (18 credits):**

- COMMNCTN 2360 Public Relations Principles 3 cr
- BUSADMIN 3630 Advertising 3 cr
- COMMNCTN 3920 Promotional Writing Techniques 3 cr
- AGINDUS 4330 Agribusiness Marketing Management 3 cr
- COMMNCTN 4360 Strategies in Public Relations 3 cr

Select 3 credits from Agricultural Sciences, Agricultural Engineering Technology or Reclamation.

**Electives (12 credits):**

Select electives in consultation with advisor.

Engineering Technology Emphasis (30 credits)

**Required Courses (18 credits):**

- AGINDUS 3830 Engines and Tractor Systems 3 cr
- AGINDUS 3850 Electrical Applications in Agriculture 3 cr
- AGINDUS 3950 Soil and Water Conservation Engineering 3 cr
- AGINDUS 4690 Hydraulics and Machinery Engineering 3 cr
- AGINDUS 4790 Materials Handling and Energy Seminar 3 cr
- AGINDUS 4890 Structures and Environmental Control 3 cr

An additional 16 credits will be elected through consultation with an approval of the advisor.

**Electives (12 credits):**

Select in consultation with advisor.

International Emphasis

**Required (12-21 credits):**

- AGINDUS 2330 World Population, Food and Resources 3 cr
- SPEECH 2300 Introduction to Intercultural Communication 3 cr

**One of the following:**

- BUSADMIN 1300 Global Business 3 cr
- BUSADMIN 3720 International Marketing 3 cr
- BUSADMIN 4140 International Management 3 cr

**One of the following for International Experience (3-12 credits):**

Study Abroad experience

or

One-on-one exchange experience

or

Faculty led international experience

Any international experience that is to be counted as credit(s) toward this emphasis must be agreed upon by the student and academic advisor prior to the experience. Of these 3-12 credits, at least 3 credits must have been agriculturally related or adequately related to the student's major.

**Electives (3-12 credits):**

Foreign Language course beyond second semester or any university course approved for International Education credit, not being used to meet the university international 3 credit requirement.

Comprehensive Emphasis (33 credits)

A specialized 24 credit program of study (plus 9 elective credits) designed in consultation with and approval of the advisor.
Agricultural Education

Contact: Mark Zidon
Program Office: 217 Pioneer Tower
Phone: 608.342.1391
E-mail: zidon@uwplatt.edu

Mission Statement

The mission of the Agricultural Education program at the University of Wisconsin-Platteville is to prepare students to become licensed to teach agricultural education primarily at the middle and secondary levels in Wisconsin public schools. The Agricultural Education and Technology Education Emphasis prepares students to teach agricultural education, technology education or both at the middle and secondary levels in Wisconsin public schools. In addition, the purpose of the Agribusiness option of Agricultural Education is to provide a broad-based background of agriculture that will enable the graduate to teach in industry, continue on to a master's degree, to work in the Cooperative Extension Service or work in other areas of agriculture.

Agricultural Education - Comprehensive (Teaching) Option

Students who major in agricultural education in the School of Agriculture, upon admission to teacher education, are jointly enrolled in the School of Education and must fulfill the requirements for teacher education specified by that school. The agricultural education curriculum meets the requirements of the Wisconsin Department of Public Instruction for the certification of agriculture/agribusiness instructors to teach all grades with a B-21 license. The program also meets the educational requirements for the provisional certificate issued by the Wisconsin State Board of Vocational, Technical and Adult Education for teachers of agriculture at the post-secondary level.

Agricultural Education Major Comprehensive Emphasis

Required Core School of Agriculture Courses (12 credits):
AGINDUS 1500 Introduction to Agribusiness and Power Systems 3 cr
AGINDUS 1750 Equipment, Structure and Power Systems 3 cr
AGSCI 1000 Introduction to Animal Science 3 cr
AGSCI 1240 The Plant-Soil Environment 3 cr

Required Agricultural Education Courses (5 credits):
AGINDUS 2920 Introduction to Agriculture and Extension Education 2 cr
AGINDUS 3900 Planning Cooperative Education in Agriculture 3 cr

Required Crops/Soils/Ornamental Horticulture Courses (7 credits):
AGSCI 2230 Soils Elective 4 cr
AGSCI 3000 Animal Nutrition 4 cr
AGINDUS 4890 Structures and Environmental Control 3 cr
AGINDUS 4930 Teaching Cooperative Education in Agriculture 3 cr

The comprehensive agricultural education major provides a balance of course work from among the four technical subject matter areas in agriculture. The major in agricultural education may be complemented with a minor or an emphasis in ornamental horticulture or agribusiness management.

Graduates who qualify for certification to teach agriculture at the junior/senior high school level must have at least 2,000 hours of occupational experience in agriculture. Students not having such experience may meet this requirement through summer employment or by enrolling in AGINDUS 4580 Agricultural Business Internship. The occupational experience required of post-secondary teachers is 12 months for the provisional certificate.

Requirements for Admission to Teacher Education

To be eligible for admission, teacher candidates must meet the following minimum requirements:

1. Successfully complete the Pre-Professional Skills Test (PPST). Passing scores for the PPST are reading 175, writing 174 and mathematics 173. Teacher candidates should take the PPST during their first year at UWP.
2. Earn grades of “C” or better in the following courses:
   Freshman Composition (ENGLISH 1130 and ENGLISH 1230), Speech (SPEECH 2010 is strongly recommended, though SPEECH 1010 will satisfy the requirement), TEACHING 1230 Introduction to Education or PHYSED 2320 Introduction to Physical Education, and COMPUTER 2010 Computer Applications in Education (or approved equivalent).
3. Have earned 40 semester credits in an accredited college of which 15 credits have been earned at UWP.
4. Have a cumulative grade point average (GPA) of 2.65 or better.
5. Prepare an admission portfolio, present it to an interview committee during Pre-Professional Days and be recommended for admission by committee.

Requirements for Admission to Student Teaching

To be eligible for admission to student teaching a candidate must:
1. Meet or exceed the minimum required grade point average (GPA) of 2.75 overall and in major(s), teaching minor(s) and professional education courses.
2. Have completed appropriate methods course(s) for the major and minor, as well as TEACHING 2130 and TEACHING 3320 or equivalent courses.
3. Have grades of “C” or better in required methods courses and in all required professional education courses.
4. Have documentation of an approved level II portfolio on file.
5. Have passed the Praxis II contest test in Agricultural Education. No waivers are allowed.
6. Have been admitted to the SOE for one full semester prior to student teaching.
7. Documentation of 2000 hours of work experience in agriculture.

Agricultural Education Major - Agricultural Education and Technology Education Emphasis

Required Core School of Agriculture Courses (16 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI</td>
<td>1000 Introduction to Animal Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI</td>
<td>1240 The Plant-Soil Environment</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI</td>
<td>2230 Soils</td>
<td>4 cr</td>
</tr>
<tr>
<td>AGINDUS</td>
<td>1750 Equipment, Structure and Power Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS</td>
<td>1500 Introduction to Agribusiness</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY</td>
<td>1530 Power Systems</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Technology Education Courses (15 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY</td>
<td>1030 Introduction to Manufacturing</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY</td>
<td>1130 Basic Wood Processes</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY</td>
<td>1200 Basic Electricity</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY</td>
<td>1230 Technical Drafting</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY</td>
<td>1430 Basic Metals</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Electives (18 credits):

<table>
<thead>
<tr>
<th>Option</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>6 cr</td>
</tr>
<tr>
<td>Industrial Studies</td>
<td>6 cr</td>
</tr>
<tr>
<td>Agriculture or Industrial Studies</td>
<td>6 cr</td>
</tr>
</tbody>
</table>

Requirements for Admission to Teacher Education

To be eligible for admission, teacher candidates must meet the following minimum requirements:

1. Successfully complete the Pre-Professional Skills Test (PPST). Passing scores for the PPST are reading 175, writing 174 and mathematics 173. Teacher candidates should take the PPST during their first year at UWP.
2. Earn grades of “C” or better in the following courses:
   Freshman Composition (ENGLISH 1130 and ENGLISH 1230), Speech (SPEECH 2010 is strongly recommended, though SPEECH 1010 will satisfy the requirement), TEACHING 1230 Introduction to Education or PHYSED 2320 Introduction to Physical Education, and COMPUTER 2010 Computer Applications in Education.
3. Attend and have written verification that the teacher candidate attended the STEPS presentation during TEACHING 1230 Introduction to Education.
4. Be recommended for admission by two people (other than friends, relatives or UWP faculty) who can assess the candidate’s potential to be a teacher.
5. Have earned 40 semester credits in an accredited college of which 15 credits have been earned at UWP.
6. Have a cumulative grade point average (GPA) of 2.65 or better.
7. Prepare an admission portfolio, present it to an interview committee during Pre-Professional Days and be recommended for admission by committee.

Requirements for Admission to Student Teaching

To be eligible for admission to student teaching a candidate must:

1. Meet or exceed the minimum required grade point average (GPA) of 2.75 overall and in major(s), teaching minor(s) and professional education courses.
2. Have completed appropriate methods course(s) for the major and minor, as well as TEACHING 2130 and TEACHING 3320 or equivalent courses.
3. Have grades of “C” or better in required methods courses and in all required professional education courses.
4. Have documentation of an approved level II portfolio on file.
5. Have passed the Praxis II contest test in Agricultural Education. No waivers are allowed.
6. Have been admitted to the SOE for one full semester prior to student teaching.
7. Documentation of 2000 hours of work experience in agriculture.

Agricultural Education - Agribusiness (Non-Teaching Emphasis)

The Agribusiness Emphasis of Agricultural Education is not intended to provide teacher certification for teaching in public schools. It is rather an option to prepare graduates for (a) teaching or working in the agricultural industry, (b) working in the Cooperative Extension Service, or (c) continuing to complete a Master of Science in Education. A master’s degree would be necessary to become employed in the Cooperative Extension Service. The Master of Science in Education would meet the requirements for obtaining a license to teach agriculture at the secondary level.

Requirements for this option are similar to those of the teaching option except that fewer education classes are taken and the student is not required to student teach. In addition, the students are not required to be admitted to the Teacher Education program. As such, they do not need to meet the GPA or PPST requirements listed for the teaching option.

Required Core SOA Courses (12 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 1500</td>
<td>Introduction to Agribusiness</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 1750</td>
<td>Equipment, Structure and Power Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 1000</td>
<td>Introduction to Animal Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 1240</td>
<td>The Plant-Soil Environment</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Agricultural Education Courses (7 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHING 1230</td>
<td>Introduction to Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>AGINDUS 2920</td>
<td>Introduction to Agriculture and Extension Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>AGINDUS 4930</td>
<td>Teaching Cooperative Education in Agriculture</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Crops/Soils/Ornamental Horticulture Courses (14 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 2230</td>
<td>Soils</td>
<td>4 cr</td>
</tr>
<tr>
<td>or AGSCI 3260</td>
<td>Seed and Grain Crops</td>
<td>3 cr</td>
</tr>
<tr>
<td>or AGSCI 3350</td>
<td>Soil Fertility and Fertilizers</td>
<td>3 cr</td>
</tr>
<tr>
<td>or AGSCI 3330</td>
<td>Soil Morphology and Classification Crops, Soils or Ornamental Horticulture Electives</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Animal Science Courses (11 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3000</td>
<td>Animal Nutrition</td>
<td>4 cr</td>
</tr>
<tr>
<td>AGSCI 3030</td>
<td>Genetics of Livestock Improvement</td>
<td>4 cr</td>
</tr>
<tr>
<td>AGSCI 4110</td>
<td>Farm Animal Reproduction</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Agribusiness Courses (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 2430</td>
<td>Agricultural Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 2500</td>
<td>Producer and Consumer Cooperatives</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3460</td>
<td>Farm Management and Record Systems</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Agriculture Option with Minor

Required Core SOA Courses (12 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 1500</td>
<td>Introduction to Agribusiness</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 1750</td>
<td>Equipment, Structure and Power Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 1000</td>
<td>Introduction to Animal Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 1240</td>
<td>The Plant-Soil Environment</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Agricultural Education Courses (7 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHING 1230</td>
<td>Introduction to Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>AGINDUS 2920</td>
<td>Introduction to Agriculture and Extension Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>AGINDUS 4930</td>
<td>Teaching Cooperative Education in Agriculture</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Crops/Soils/Ornamental Horticulture Courses (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 2230</td>
<td>Soils</td>
<td>3 cr</td>
</tr>
<tr>
<td>or AGSCI 3260</td>
<td>Seed and Grain Crops</td>
<td>3 cr</td>
</tr>
<tr>
<td>or AGSCI 3350</td>
<td>Soil Fertility and Fertilizers</td>
<td>3 cr</td>
</tr>
<tr>
<td>or AGSCI 3330</td>
<td>Soil Morphology and Classification Crops, Soils or Ornamental Horticulture Electives</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Animal Science Courses (11 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3000</td>
<td>Animal Nutrition</td>
<td>4 cr</td>
</tr>
<tr>
<td>AGSCI 3030</td>
<td>Genetics of Livestock Improvement</td>
<td>4 cr</td>
</tr>
<tr>
<td>AGSCI 4110</td>
<td>Farm Animal Reproduction</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Agribusiness Courses (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 2430</td>
<td>Agricultural Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 2500</td>
<td>Producer and Consumer Cooperatives</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3460</td>
<td>Farm Management and Record Systems</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Required Agribusiness Engineering Technology Courses (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 3830</td>
<td>Engines and Tractor Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3950</td>
<td>Soil and Water Conservation</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 4890</td>
<td>Structures and Environmental Control</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Other: Agriculture courses must total 36 credits and a university minor of 24 credits must also be completed.
**Mission Statement**

The Animal Science major will prepare graduates who value and use critical thinking, communication and social skills through liberal arts and science based technology education. They will contribute to the success and profitability of vocations involved in animal care, welfare and production of high quality animal derived food and medicine for national and international consumption. Graduates will also acquire skills that will guide them in designing and applying a synergy of animal production and land use with lasting environmental stability.

**Goals**

Graduates of the Animal Science program will be:

1. Conscious of and sensitive to the issues involved with profitable and ethical management, care, welfare and health of animals.

   **Outcomes:**
   - Students support the scientific evidence for safety of world food supplied through science based production practices
   - Students can examine and evaluate various perspectives of animal health and welfare
   - Students can analyze the structure of regional, national and international policies that affect bio-security

2. Critical thinkers with effective oral and written communication skills as individuals and as team members

   **Outcomes:**
   - Students value and enhance their communication skills with liberal arts and science based knowledge
   - Increase self confidence and comfort level during public speaking
   - Students demonstrate ability to independently investigate, analyze and conclude decisions clearly and concisely
   - Collect and analyze information and compose professional, technical reports

3. Able to determine and measure profitable and environmentally sustainable agricultural practices

   **Outcomes:**
   - Competent in application of computerized technology
   - Utilization of proven physical and chemical analyses
   - Evaluate genetic selection and performance programs
   - Appreciate and apply quality assurance programs for products
   - Recognize and compare optimal and maximal production practices for sustainability

4. Informed and aware of regional, national and international obligations, opportunities and experiences

   **Outcomes:**
   - Generate interest and increased participation in cross cultural experiences
   - Expand student’s comfort zone for global pursuits
   - Benefit from external professional inputs of diverse backgrounds

Animal Science offers two options, a major with a university minor or a comprehensive major with emphases. AGSCI 1000 will count as an elective in the Animal Science Minor.

**Animal Science Major (36 credits)**

**Required Core SOA Courses (12 credits):**

- **AGINDUS 1500** Introduction to Agribusiness 3 cr
- **AGINDUS 1750** Equipment, Structure and Power Systems 3 cr
- **AGSCI 1000** Introduction to Animal Science 3 cr
- **AGSCI 1240** The Plant-Soil Environment 3 cr

**Required Animal Science Courses (16 credits):**

- **AGSCI 3000** Animal Nutrition 4 cr
- **AGSCI 3020** Anatomy and Physiology of Domestic Livestock 3 cr
- **AGSCI 3030** Genetics of Livestock Improvement 3 cr
- **AGSCI 4110** Farm Animal Reproduction 4 cr
- **AGSCI 4190** Seminar in Animal Science and Biotechnology 2 cr

**Two Courses From (8 credits):**

- **AGSCI 4030** Beef Management 4 cr
- **AGSCI 4040** Swine Management 4 cr
- **AGSCI 4070** Dairy Cattle Management 4 cr

**One Course From (3 credits):**

- **AGSCI 2030** Introduction to Food Science 3 cr
- **AGSCI 3010** Dairy Product Analysis and Processing 3 cr
- **AGSCI 3040** Principles of Meat Science 3 cr

**Electives (9 credits):**

- **AGSCI 1200** Animal Science Management 3 cr
- **AGSCI 2000** Meat Animal Evaluation 3 cr
- **AGSCI 2020** Introduction to Dairy Science 3 cr
- **AGSCI 2050** Dairy Cattle Evaluation 3 cr
- **AGSCI 3120** Topics in Animal Health 3 cr
- **AGSCI 3600** Ration Formulation/Evaluation 3 cr
- **AGSCI 4080** Ruminant Nutrition 3 cr
- **AGSCI 4090** Monogastric Nutrition 3 cr
- **AGSCI 4150** Biology of Lactation 3 cr
- **AGSCI 4200** Individual Study in Animal Science 1-4 cr

Any approved university minor 24 cr

Other courses as approved by advisor

---

**Contact:**  
John N. Tembei  
Office: 223 Pioneer Tower  
Phone: 608.342.1063  
E-mail: tembeij@uwplatt.edu

**Animal Science**
Animal Science Comprehensive
Major (60 Credits)

**Required Core SOA Courses (12 credits):**
- AGINDUS 1500 Introduction to Agribusiness 3 cr
- AGINDUS 1750 Equipment, Structure and Power Systems 3 cr
- AGSCI 1000 Introduction to Animal Science 3 cr
- AGSCI 1240 The Plant-Soil Environment 3 cr

**Required Animal Science Courses (16 credits):**
- AGSCI 3000 Animal Nutrition 4 cr
- AGSCI 3020 Anatomy and Physiology of Domestic Animals 3 cr
- AGSCI 3030 Genetics of Livestock Improvement 3 cr
- AGSCI 4110 Farm Animal Reproduction 4 cr
- AGSCI 4190 Seminar in Animal Science and Biotechnology 2 cr

**At least two courses from (8 credits):**
- AGSCI 4030 Beef Management 4 cr
- AGSCI 4040 Swine Management 4 cr
- AGSCI 4070 Dairy Cattle Management 4 cr

Meat and Livestock Emphasis must take AGSCI 4030 and AGSCI 4040. Dairy Emphasis must take AGSCI 4070.

**At least one course from (3 credits):**
- AGSCI 2030 Introduction to Food Science 3 cr
- AGSCI 3010 Dairy Product Analysis and Processing 3 cr
- AGSCI 3040 Principles of Meat Science 3 cr

Meat and Livestock Emphasis must take AGSCI 3010. Dairy Emphasis must take AGSCI 3010.

**Agribusiness Emphasis**

**Required Courses (12 credits):**
- AGINDUS 2430 Agricultural Marketing 3 cr
- AGINDUS 3410 Agriculture Consulting/Sales 3 cr
- AGINDUS 3460 Farm Management and Record Systems 3 cr
- AGINDUS 3500 Agricultural Prices and Risk Management 3 cr

**Electives (21 credits):**
Other courses approved by advisor

**Dairy Emphasis**

**Required Courses (12 credits):**
- AGSCI 2020 Introduction to Dairy Science 3 cr
- AGSCI 2050 Dairy Cattle Evaluation 3 cr
- AGSCI 4080 Ruminant Nutrition 3 cr
- AGSCI 4150 Biology of Lactation 3 cr

**Electives (21 credits):**
Other courses approved by advisor

**International Emphasis**

**Required (12-21 credits):**
- AGINDUS 2330 World Population, Food and Resources 3 cr
- SPEECH 2300 Introduction to Intercultural Communication 3 cr

**One course from:**
- BUSADMIN 1300 Global Business 3 cr
- BUSADMIN 3720 International Marketing 3 cr
- BUSADMIN 4140 International Management 3 cr

**One International Experience Course (3-12 credits):**
- Study Abroad experience
- One-on-one exchange experience
- Faculty led international experience

* Any international experience that is to be counted as credit(s) toward this emphasis must be agreed upon by the student and academic advisor prior to the experience. Of these 3-12 credits, at least 3 credits must have been agriculturally related or adequately related to the student's major.

**International Education Electives (3-12 credits):**
- Foreign Language course beyond second semester
- Any university course approved for International Education credit, not being used to meet the university international 3 credit requirement.

**Animal Science Electives (9 credits):**
Other courses approved by advisor

**Meat and Livestock Emphasis**

**Required Courses (3 credits):**
- AGSCI 2000 Meat Animal Evaluation 3 cr

**Electives (30 credits):**
Other courses approved by advisor

**Science Emphasis**

**Required Courses (26 credits):**
- CHEMSTRY 1240 General Chemistry 4 cr
- CHEMSTRY 3510 Organic Chemistry Lab 1 cr
- CHEMSTRY 3540 Organic Chemistry 4 cr
- CHEMSTRY 4630 Biochemistry 3 cr
- BIOLOGY 3240 Microbiology 4 cr
- PHYSICS 1140 Introduction to Physics 5 cr
- PHYSICS 1240 Introduction to Physics II 5 cr

**Electives (7 credits):**
- BIOLOGY 3040 Comparative Anatomy of Vertebrates 4 cr
- BIOLOGY 3120 Animal Tissue Culture 3 cr
- BIOLOGY 3140 Vertebrate Embryology 4 cr
- BIOLOGY 3330 Principles of Genetics 3 cr
- BIOLOGY 3530 Advanced Biotechnology 3 cr
- BIOLOGY 3620 Essentials of Immunology 2 cr
- BIOLOGY 3750 Fresh Water Biology 3 cr
- BIOLOGY 4340 Mammalian Histology 3 cr
- CHEMSTRY 3610 Organic Chemistry Lab 1 cr
- CHEMSTRY 3630 Organic Chemistry 3 cr
Other courses approved by advisor
Ornamental Horticulture

Contact: Michael E. Compton  
Office: 219 Pioneer Tower  
Phone: 608.342.1323  
E-mail: compton@uwplatt.edu

Ornamental horticulture is the art and science of producing and using plants for their aesthetic value. It is a division of the broader field of horticulture involved in the production and sales of greenhouse, florist and nursery plants as well as the design and management of landscapes and interior spaces for public and private use.

Mission Statement

The ornamental horticulture program will prepare graduates that value and use creative and critical thinking, are effective communicators and act as responsible, ethical and competent horticulturists. This will be achieved by combining a solid liberal arts education with professional curricular and educational opportunities aimed at combining the important theoretical and practical aspects of the horticultural and biological sciences with the managerial skills necessary for preparing students for a successful career in ornamental horticulture.

Goals and Learning Outcomes

Graduates of the Ornamental Horticulture program will:

1. Demonstrate effective oral and written communication skills.

Outcomes:
- Students will enhance and value their written and oral communication skills with liberal arts and science-based knowledge
- Students will improve their self-confidence and comfort level during public speaking
- Students will be able to communicate with their peers in the ornamental horticulture and botanic fields using professional terminology

2. Exhibit working knowledge of ornamental plant species in Midwest landscapes, greenhouses, athletic fields, and public and interior spaces.

Outcomes:
- Students will possess working knowledge of current plant nomenclature for important ornamental plant species
- Students will possess working knowledge of the care, use and placement of ornamental plant species in a variety of settings

3. Demonstrate an in-depth comprehension of the horticultural and biological sciences, and be able to apply their knowledge as it relates to ornamental horticulture in a variety of settings.

Outcomes:
- Comprehend and apply knowledge of plant physiological processes on plant growth and development of natural and bioengineered plants in production and landscape settings
- Comprehend and apply knowledge of genotypic and environmental influences on plant growth and development
- Comprehend and apply knowledge of the influence of soils and soil-less growing media on plant growth and development in protected and unprotected ornamental horticulture
- Comprehend and apply the basic principles of integrated pest management to control weeds, pests, diseases and physiological disorders of ornamental plants
- Comprehend and apply the basic principles of landscape design and management

4. Possess the ability to think creatively and recognize, analyze, diagnose and critically evaluate problems and practices, as well as employ problem solving techniques individually or using a team-oriented approach.

Outcomes:
- Demonstrate an ability to observe, investigate and evaluate problem situations to achieve clear and concise deductions
- Possess the ability to apply a logical, stepwise approach to solving practical problems
- Demonstrate an ability to collect and analyze information and compose professional, technical reports

5. Possess a comprehension of the administrative and managerial skills necessary when managing and operating a horticultural business.

Outcomes:
- Competent in the application of computerized technology
- Comprehend effective management of employees and colleagues of diverse backgrounds
- Comprehend effective management and attainment of nonhuman resources
- Recognize and compare efficient and optimal production practices for sustainability

6. Be professionals and leaders in society and ornamental horticulture that act in a courteous, ethical and responsible manner.

Outcomes:
- Seek and participate in campus, community, professional and international opportunities
- Comprehend the need to act ethically and responsibly in professional and personal matters
- Appreciate the contribution of colleagues regardless of rank, race, gender or sexual orientation

Ornamental horticulture is a 36-credit major. Students must also choose a 24-credit emphasis offered through the ornamental horticulture major or 24-credit minor. Emphasis areas associated directly with the ornamental horticulture major include business and marketing, breeding and genetics, professional landscape management and international.

Experiential learning is an important part of the ornamental horticulture curricula. For this reason, students are required to complete a three-credit internship. Internships are available throughout the year across the United States, and provide excellent practical experience to earn college credits.

Students that complete the program qualify for jobs in landscape horticulture, turf management, nursery and garden center operations, bedding plant production, greenhouse management, retail floral shops, seed production, or education and research. High school students should prepare for the ornamental horticulture major by completing courses in math, science and ornamental horticulture. Two or more years of Spanish is highly recommended. Summer jobs with a greenhouse, nursery or landscaping firm are beneficial.
Ornamental Horticulture Major
(36 credits)

**Required Courses (30 credits):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 1240</td>
<td>The Plant-Soil Environment</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 2230</td>
<td>Soils</td>
<td>4 cr</td>
</tr>
<tr>
<td>AGSCI 2280</td>
<td>Woody Landscape Plants</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3220</td>
<td>Plant Development and Biotechnology</td>
<td>4 cr</td>
</tr>
<tr>
<td>AGSCI 3310</td>
<td>Soils, Crops and Ornamental Horticulture Seminar</td>
<td>1 cr</td>
</tr>
<tr>
<td>AGSCI 3320</td>
<td>Landscape Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4260</td>
<td>Interior Plants</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4360</td>
<td>Greenhouse Operation</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4470</td>
<td>Plant Physiology and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 4530</td>
<td>Plant Physiology and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 4580</td>
<td>Agricultural Business Internship</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Electives (6 credits):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3200</td>
<td>Pest Identification and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3230</td>
<td>Turfgrass Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3240</td>
<td>Herbaceous Plants</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3260</td>
<td>Landscape Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3300</td>
<td>Fruit and Vegetable Production</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3320</td>
<td>Landscape Management**</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4250</td>
<td>Weed Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 4580</td>
<td>Agricultural Business Internship</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3330</td>
<td>Genetics</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3340</td>
<td>Entomology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3550</td>
<td>Morphology and Evolution of Vascular Plants</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3640</td>
<td>Plant Systematics</td>
<td>4 cr</td>
</tr>
<tr>
<td>RECLAM 3020</td>
<td>Reclamation Revegetation</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Counts as an elective if not used to fulfill requirement for ornamental horticulture major.**

**Areas of Emphasis**

**Business and Marketing Emphasis**

Requirements for Ornamental Horticulture Major
(30 credits)

**Required Courses (8 credits):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTING 2010</td>
<td>Financial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 1500</td>
<td>Introduction to Agribusiness</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 1300</td>
<td>Global Business</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3240</td>
<td>Herbaceous Plants</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

**Ornamental Horticulture Electives (7-10 credits):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3200</td>
<td>Pest Identification and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3230</td>
<td>Turfgrass Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3270</td>
<td>Landscape Design</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
### Professional Landscape Management Emphasis

**Requirements for Ornamental Horticulture Major**

**30 credits**

#### Required Courses (14 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3230</td>
<td>Turfgrass Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3240</td>
<td>Herbaceous Plants</td>
<td>2 cr</td>
</tr>
<tr>
<td>AGSCI 3270</td>
<td>Landscape Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4250</td>
<td>Weed Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4260</td>
<td>Interior Plants</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

#### Professional Landscape Management Electives (16 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 1500</td>
<td>Introduction to Agribusiness</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 1750</td>
<td>Equipment, Structure, and Power Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3830</td>
<td>Engine and Tractor Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3850</td>
<td>Electrical Applications in Agriculture</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3950</td>
<td>Soil and Water Conservation Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 4580</td>
<td>Agribusiness Internship</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3200</td>
<td>Pest Identification and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3300</td>
<td>Fruit and Vegetable Production</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3350</td>
<td>Soil Fertility and Fertilizers</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3400</td>
<td>Special Topics in Ornamental Horticulture</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3330</td>
<td>Genetics</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3340</td>
<td>Entomology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3450</td>
<td>Ecology and Evolution</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3370</td>
<td>Undergraduate Research in Ornamental Horticulture</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3550</td>
<td>Morphology of Vascular Plants</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3640</td>
<td>Plant Systematics</td>
<td>4 cr</td>
</tr>
<tr>
<td>BUSADMIN 2330</td>
<td>Leadership and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 2630</td>
<td>Introduction to Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 3230</td>
<td>Small Business Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 4200</td>
<td>Employee Recruitment</td>
<td>3 cr</td>
</tr>
<tr>
<td>RECLAM 3020</td>
<td>Reclamation Revegetation</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 1130</td>
<td>Basic Woods</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 1260</td>
<td>Building and Construction Drafting</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Breeding and Genetics Emphasis

**Requirements for Ornamental Horticulture Major**

**30 credits**

#### Required Courses (15 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3240</td>
<td>Herbaceous Plants</td>
<td>2 cr</td>
</tr>
<tr>
<td>AGSCI 4240</td>
<td>Plant Breeding Principles</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3330</td>
<td>Genetics</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3550</td>
<td>Biotechnology</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMISTRY 1140</td>
<td>General Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 1240</td>
<td>General Chemistry</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

#### Breeding and Genetics Electives (6-12 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3200</td>
<td>Pest Identification and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3230</td>
<td>Turfgrass Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3300</td>
<td>Fruit and Vegetable Production</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3320</td>
<td>Landscape Management **</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4260</td>
<td>Interior Plants</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3370</td>
<td>Undergraduate Research</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>AGSCI 3460</td>
<td>Special Topics in Ornamental Horticulture</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>AGSCI 4250</td>
<td>Weed Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 4580</td>
<td>Agricultural Business Internship</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 2040</td>
<td>Cell Biology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3240</td>
<td>Microbiology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3340</td>
<td>Entomology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 4040</td>
<td>Molecular Biology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3550</td>
<td>Morphology of Vascular Plants</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3640</td>
<td>Plant Systematics</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 3540</td>
<td>Organic Chemistry Lecture</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 3510</td>
<td>Organic Chemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY 4630</td>
<td>General Biochemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMISTRY 4720</td>
<td>General Biochemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>PHIILSPHY 2540</td>
<td>Science, Technology and Ethics</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Breeding and Genetics Business Electives (3-9 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 1500</td>
<td>Introduction to Agribusiness</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 4330</td>
<td>Agribusiness Marketing Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 2330</td>
<td>Leadership and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 2630</td>
<td>Introduction to Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 3030</td>
<td>Human Resource Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 3230</td>
<td>Small Business Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 4200</td>
<td>Employee Recruitment</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3010</td>
<td>Business Communications</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 1830</td>
<td>Microcomputer Applications</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 2830</td>
<td>Advanced Microcomputer Applications</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Breeding and Genetics**

**Counts as an elective if not used to fulfill requirements for ornamental horticulture major.**

### Ornamental Horticulture Breeding and Genetics Business Electives (3-9 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 1500</td>
<td>Introduction to Agribusiness</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 4330</td>
<td>Agribusiness Marketing Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 2330</td>
<td>Leadership and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 2630</td>
<td>Introduction to Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 3030</td>
<td>Human Resource Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 3230</td>
<td>Small Business Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 4200</td>
<td>Employee Recruitment</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3010</td>
<td>Business Communications</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 1830</td>
<td>Microcomputer Applications</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 2830</td>
<td>Advanced Microcomputer Applications</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
International Emphasis

Requirements for Ornamental Horticulture Major (30 credits)

Required Courses (14-23 credits):
AGSCI  3420  Herbaceous Plants  2 cr
AGINDUS  2330  World Population, Food and Resources  3 cr
SPEECH  2300  Intercultural Communication  3 cr

One course from:
BUSADMIN  1300  Global Business  3 cr
BUSADMIN  3720  International Marketing  3 cr
BUSADMIN  4940  International Management  3 cr

One International Experience Course (3-12 credits)*:
Study abroad experience
One-on-one exchange experience
Faculty led international experience
Any international experience that is to be counted as credit(s) toward this emphasis must be agreed upon by the student and academic advisor prior to the experience. Of these 3-12 credits, at least 3 credits must have been agriculturally related or adequately related to the student's major.

Ornamental Horticulture Electives (4 credits):
AGSCI  3200  Pest Identification and Management  3 cr
AGSCI  3230  Turfgrass Management  3 cr
AGSCI  3270  Landscape Design  3 cr
AGSCI  3300  Fruit and Vegetable Production  3 cr
AGSCI  3320  Landscape Management  3 cr
or
AGSCI  4260  Interior Plants  3 cr
AGSCI  3370  Undergraduate Research in Ornamental Horticulture  1-3 cr
AGSCI  3400  Special Topics in Ornamental Horticulture  1-3 cr
AGSCI  4250  Weed Science  3 cr
BIOLOGY  3330  Genetics  3 cr
BIOLOGY  3340  Entomology  4 cr
BIOLOGY  3640  Plant Systematics  4 cr
BIOLOGY  3550  Morphology and Evolution of Vascular Plants  4 cr
RECLAM  3020  Reclamation Revegetation  3 cr
AGINDUS  4580  Agribusiness Internship  3 cr

International Electives (3-12 credits):
Students may select any International Education course not already used to fulfill the general education International requirement and/or a foreign language course beyond the second semester.

RECLAMATION, ENVIRONMENT AND CONSERVATION

Contact:  Thomas Hunt
Program Office:  207 Pioneer Tower
Phone:  608.342.1898
E-mail:  huntt@uwplatt.edu

Program Description

Reclamation, Environment and Conservation (REC) is an applied environmental science, which addresses the restoration and management of natural resources by the practical application of science, design and technology. Its basis lies in both ethics and sound management of the planet. REC is a natural adjunct to land use activities such as mining, timber management and grazing; construction, development and agriculture; and includes the preservation, conservation and restoration of our natural and cultural heritage.

Program Mission

The mission of the Reclamation, Environment and Conservation (REC) program is to promote environmental awareness and actions through interdisciplinary instruction and outreach. Its goal is to help protect, restore and conserve the environment for future generations.

Program Objectives and Student Learning Outcomes

Graduates of the Reclamation, Environment and Conservation program will:

• Describe land management and reclamation/restoration activities and outcomes and explain their importance to a wide range of audiences.
• Characterize and apply interdisciplinary knowledge, skills and ethics necessary to restore and manage cultural and natural landscapes.
• Compare and evaluate the roles and responsibilities of stakeholders such as agencies, groups and organizations engaged in land management and reclamation/restoration.
• Apply the skills to plan, design and construct a reclamation/restoration project.
• Analyze and evaluate the reclamation/restoration results and the efficacy of methods and materials used in reclamation project management.
• Demonstrate knowledge and perform administrative and technical tasks of reclamation project management.

The interdisciplinary courses in the REC program are established and coordinated by the director and a council comprised of faculty across the university. Within the REC major, a student may elect to focus upon a physical emphasis, a biological emphasis or a chemistry emphasis. This division arises from the general division of emphases at the professional level. The physical emphasis is closely allied with geology and civil engineering, whereas the biological emphasis is closely allied with ecology, soils, agriculture and natural sciences. It is possible to obtain a double major in one of the closely related fields while completing requirements for the REC major. Students who elect a major in REC should have an aptitude for science, design and technical courses, and a strong commitment to the environment.
**Reclamation, Environment and Conservation Major**

**Required Courses (52-68 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMSTRY 1240</td>
<td>Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3110</td>
<td>Environmetal Chemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3130</td>
<td>Environmental Chemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 1830</td>
<td>Microcomputer Applications</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 2230</td>
<td>Soils</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3450</td>
<td>Ecology and Evolution</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 2420</td>
<td>FBI: Fundamentals of Biological Investigations</td>
<td>2 cr</td>
</tr>
<tr>
<td>or ENGLISH 3000</td>
<td>Technical Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>or CIVILENG 2630</td>
<td>Elements of Surveying</td>
<td>3 cr</td>
</tr>
<tr>
<td>or RECLAM 1010</td>
<td>Introduction to Reclamation</td>
<td>3 cr</td>
</tr>
<tr>
<td>or RECLAM 3020</td>
<td>Reclamation Revegetation</td>
<td>3 cr</td>
</tr>
<tr>
<td>or RECLAM 3900</td>
<td>Reclamation Demonstration Field Trip</td>
<td>3 cr</td>
</tr>
<tr>
<td>or RECLAM 4940</td>
<td>Reclamation Project Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>or GENENG 1320</td>
<td>Engineering Graphics/Computer Graphics</td>
<td>2 cr</td>
</tr>
<tr>
<td>or INDUSTRY 1230</td>
<td>Technical Drafting</td>
<td>3 cr</td>
</tr>
<tr>
<td>or GEOLOGY 1140</td>
<td>Physical Geology</td>
<td>4 cr</td>
</tr>
<tr>
<td>or GEOLOGY 3130</td>
<td>Engineering Geology</td>
<td>3 cr</td>
</tr>
<tr>
<td>or CIVILENG 4300</td>
<td>Hydrology</td>
<td>3 cr</td>
</tr>
<tr>
<td>or GEOLOGY 3430</td>
<td>Hydrogeology</td>
<td>3 cr</td>
</tr>
<tr>
<td>or CIVILENG 4310</td>
<td>Groundwater Hydrology</td>
<td>3 cr</td>
</tr>
<tr>
<td>or RECLAM 3940</td>
<td>GIS/GPS and Mapping</td>
<td>3 cr</td>
</tr>
<tr>
<td>or CIVILENG 4630</td>
<td>Geographic Information Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>or GEOGRAPHY 3230</td>
<td>Geographic Information Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3950</td>
<td>Soil and Water Conservation Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>or AGSCI 4350</td>
<td>Soil and Water Conservation</td>
<td>3 cr</td>
</tr>
<tr>
<td>or CIVILENG 3020</td>
<td>Construction Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>or CIVILENG 3340</td>
<td>Environmental Engineering</td>
<td>4 cr</td>
</tr>
<tr>
<td>or RECLAM 3880</td>
<td>Environmental Law</td>
<td>3 cr</td>
</tr>
<tr>
<td>or RECLAM 4920</td>
<td>Independent Study</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>or RECLAM 4660</td>
<td>Cooperative Field Experience</td>
<td>3-6 cr</td>
</tr>
</tbody>
</table>

**Physical Emphasis**

**Required Courses (10-11 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOGRAPHY 3040</td>
<td>Mineralogy and Lithology</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 1140</td>
<td>Introduction to Physics I</td>
<td>4 cr</td>
</tr>
<tr>
<td>or PHYSICS 2530</td>
<td>General Physics I and Lab</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRAPHY 2230</td>
<td>Cartography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRAPHY 3520</td>
<td>Air Photo Interpretation</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRAPHY 3720</td>
<td>Remote Sensing</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRAPHY 1140</td>
<td>Physical Geography and Geomorphology</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOLOGY 3230</td>
<td>Sedimentary Geology</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOLOGY 3830</td>
<td>Field Methods and Mapping</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOLOGY 4340</td>
<td>Regional Geomorphology</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

**Chemistry Emphasis**

**Required Courses (10 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMSTRY 2150</td>
<td>Quantitative Analysis</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3540</td>
<td>Organic Chemistry I Lecture</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3510</td>
<td>Organic Chemistry I Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3630</td>
<td>Organic Chemistry II Lecture</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3610</td>
<td>Organic Chemistry II Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMSTRY 1240</td>
<td>The Plant-Soil Environment</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3350</td>
<td>Soil Fertility and Fertilizers</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 1750</td>
<td>Diversity of Life</td>
<td>5 cr</td>
</tr>
<tr>
<td>BIOLOGY 3460</td>
<td>Ecological Methods of Research</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3640</td>
<td>Plant Systematics</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3660</td>
<td>Animal Communities of Wisconsin</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3650</td>
<td>Plant Communities of Wisconsin</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 4530</td>
<td>Plant Pathology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3750</td>
<td>Freshwater Biology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3240</td>
<td>Microbiology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3340</td>
<td>Entomology</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

**Biology Emphasis**

**Required Courses (15 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3350</td>
<td>Soil Fertility and Fertilizers</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 1750</td>
<td>Diversity of Life</td>
<td>5 cr</td>
</tr>
<tr>
<td>BIOLOGY 3460</td>
<td>Ecological Methods of Research</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3640</td>
<td>Plant Systematics</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3660</td>
<td>Animal Communities of Wisconsin</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3650</td>
<td>Plant Communities of Wisconsin</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 4530</td>
<td>Plant Pathology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3750</td>
<td>Freshwater Biology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3240</td>
<td>Microbiology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3340</td>
<td>Entomology</td>
<td>4 cr</td>
</tr>
</tbody>
</table>
Mission and Purpose of the Soil and Crop Science Program

Students majoring in Soil and Crop Science will be prepared for careers as resourceful, ethically responsible and competent agronomists by combining their liberal arts education with professional course work and practical experience.

Program Objectives and Student Learning Outcomes

Students that complete the soil and crop science program are able to:

- Conceptualize, understand and apply chemical, physical, biological and agronomic sciences to address practical agronomic problems.
- Apply scientific principles to gather, analyze and interpret agronomic data.
- Effectively and accurately communicate agronomic information in written and oral forms.
- Use and become familiar with new technologies in agronomy and related sciences.
- Understand the professional, legal and ethical responsibilities associated with careers in agronomy.

Soil and crop science is a 36-credit major. Students majoring in soil and crop science must complete a set of required courses along with either a 24-credit emphasis or a university minor. Emphasis areas associated directly with the soil and crop science major include agribusiness, plant breeding and genetics, comprehensive and international.

The Soil and Crop Science program supports the UWP mission of providing baccalaureate degree programs that meet regional needs. Students completing this program will be prepared to pursue careers in agronomy or to continue their education through advanced study. Our graduates have enjoyed job placements near 100 percent in careers that support Agriculture, the leading state and regional industry.

Soil and Crop Science Major

Required SOA Courses (12 credits):
- AGINDUS 1500 Introduction to Agribusiness 3 cr
- AGINDUS 1750 Equipment, Structure and Power Systems 3 cr
- AGSCI 1000 Introduction to Animal Science 3 cr
- AGSCI 1240 The Plant-Soil Environment 3 cr

Required Courses (27 credits):
- AGSCI 2230 Soils 4 cr
- AGSCI 3200 Pest Identification and Management 3 cr
- AGSCI 3220 Plant Development and Technology 4 cr
- AGSCI 3310 Soils, Crops and Ornamental Horticulture Seminar 1 cr
- AGSCI 3340 Nutrient Management 3 cr
- AGSCI 3350 Soil Fertility and Fertilizers 3 cr
- AGSCI 4340 Plant Physiology 3 cr
- AGSCI 4350 Soil and Water Conversion 3 cr
- AGINDUS 4580 Agribusiness Internship 3 cr

Electives (9 credits):
- AGSCI 3230 Turfgrass Management 3 cr
- AGSCI 3260 Seed and Grain Crops 3 cr
- AGSCI 3300 Fruit and Vegetable Production 3 cr
- AGSCI 3330 Soil Morphology and Classification 3 cr
- AGSCI 3380 Special Problems in Soil Science 1-3 cr
- AGSCI 3390 Special Problems in Crop Science 1-3 cr
- AGSCI 4240 Plant Breeding Principles 3 cr
- AGSCI 4250 Weed Science 3 cr
- AGSCI 4320 Forage Crops 3 cr
- AGSCI 4360 Crop Pesticides and Growth Regulators 3 cr
- AGSCI 4370 Soil Physics 3 cr
- AGSCI 4390 Soil Analysis 3 cr
- AGSCI 4240 Plant Breeding Principles 3 cr
- AGSCI 4250 Weed Science 3 cr
- AGSCI 4320 Forage Crops 3 cr
- AGSCI 4360 Crop Pesticides and Growth Regulators 3 cr
- AGSCI 4370 Soil Physics 3 cr
- AGSCI 4390 Soil Analysis 3 cr
- AGINDUS 4580 Agribusiness Internship 3 cr

Agribusness Emphasis

Required Courses (12 credits):
- AGINDUS 2430 Agricultural Marketing 3 cr
- AGINDUS 3410 Agricultural Consulting and Sales 3 cr
- AGINDUS 3460 Farm Management and Record Systems 3 cr
- AGINDUS 3500 Agricultural Prices and Risk Management 3 cr

Soil and Crop Science Electives (12 credits):
- AGSCI 3230 Turfgrass Management 3 cr
- AGSCI 3260 Seed and Grain Crops 3 cr
- AGSCI 3300 Fruit and Vegetable Production 3 cr
- AGSCI 3330 Soil Morphology and Classification 3 cr
- AGSCI 3380 Special Problems in Soil Science 1-3 cr
- AGSCI 3390 Special Problems in Crop Science 1-3 cr
- AGSCI 4250 Weed Science 3 cr
- AGSCI 4320 Forage Crops 3 cr
- AGSCI 4360 Crop Pesticides and Growth Regulators 3 cr
- AGSCI 4370 Soil Physics 3 cr
- AGSCI 4390 Soil Analysis 3 cr

Agribusiness Electives (9 credits):
- AGINDUS 2500 Producer and Consumer Cooperatives 3 cr
- AGINDUS 3430 Quantitative Methods in Agribusiness Marketing Mgmt. 3 cr
- AGINDUS 3520 Agricultural Law 3 cr
- AGINDUS 3530 Agricultural Commodity Marketing 3 cr
- AGINDUS 4330 Agribusiness Marketing Management 3 cr
- AGINDUS 4400 Livestock and Meat Marketing 3 cr
- AGINDUS 4460 Agricultural Policy Seminar 3 cr
- AGINDUS 4500 Agribusiness Management 3 cr
- AGINDUS 4580 Agribusiness Internship 3 cr
- AGINDUS 4620 Agricultural Commodity Price Forecasting 3 cr
Plant Breeding and Genetics Emphasis

**Required Courses (13 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 4240</td>
<td>Plant Breeding Principles</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3330</td>
<td>Principles of Genetics</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3550</td>
<td>Biotechnology</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 1240</td>
<td>General Chemistry</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

**Soil and Crop Science Electives (9 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3230</td>
<td>Turfgrass Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3260</td>
<td>Seed and Grain Crops</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3300</td>
<td>Fruit and Vegetable Production</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3330</td>
<td>Soil Morphology and Classification</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3390</td>
<td>Special Problems in Crop Science</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>AGSCI 4250</td>
<td>Weed Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4320</td>
<td>Forage Crops</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4360</td>
<td>Crop Pesticides and Growth Regulators</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4390</td>
<td>Soil Analysis</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Plant Breeding and Genetics Emphasis Electives (11 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY 2040</td>
<td>Cell Biology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3240</td>
<td>Microbiology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3340</td>
<td>Entomology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3640</td>
<td>Plant Systematics</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 4040</td>
<td>Molecular Biology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 4530</td>
<td>Plant Pathology</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3540</td>
<td>General Organic Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3510</td>
<td>General Organic Chemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMSTRY 4630</td>
<td>General Biochemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 4610</td>
<td>General Biochemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>RECLAM 3020</td>
<td>Reclamation Revegetation</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHLSPHY 2540</td>
<td>Science, Technology and Ethics</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Comprehensive Soil and Crop Science Emphasis

**Required Courses (12 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3260</td>
<td>Seed and Grain Crops</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3330</td>
<td>Soil Morphology and Classification</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4250</td>
<td>Weed Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4320</td>
<td>Forage Crops</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Biological or Physical Science Electives (7-9 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY 3240</td>
<td>Microbiology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3330</td>
<td>Genetics</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3340</td>
<td>Entomology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3450</td>
<td>Ecology and Evolution</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3640</td>
<td>Plant Systematics</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 4530</td>
<td>Plant Pathology</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOLOGY 1140</td>
<td>Physical Geology</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRAPHY 1240</td>
<td>Weather and Climate</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRAPHY 3840</td>
<td>Soil Geomorphology</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 1140</td>
<td>Introduction to Physics</td>
<td>5 cr</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1110</td>
</tr>
</tbody>
</table>

**Comprehensive Electives (12-14 credits):**

Select any Agriculture courses

International Emphasis

**Required Courses (44-53 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGINDUS 2330</td>
<td>World Population, Food and Resources</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 4580</td>
<td>Agribusiness Internship</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPEECH 2300</td>
<td>Intercultural Communication</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**One course from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSADMIN 1300</td>
<td>Global Business</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 3720</td>
<td>International Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 4940</td>
<td>International Management</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**One International Experience Course (3-12 credits):**

- Study abroad experience
- One-on-one exchange experience
- Faculty led international experience

Any international experience that is to be counted as credit(s) toward this emphasis must be agreed upon by the student and academic advisor prior to the experience. Of these 3-12 credits, at least 3 credits must have been agriculturally related or adequately related to the student's major.

**Soil and Crop Science Electives (9 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3230</td>
<td>Turfgrass Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3330</td>
<td>Fruit and Vegetable Production</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3330</td>
<td>Soil Morphology and Classification</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3380</td>
<td>Special Problems in Soil Science</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>AGSCI 3390</td>
<td>Special Problems in Crop Science</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>AGSCI 4240</td>
<td>Plant Breeding Principles</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4250</td>
<td>Weed Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4320</td>
<td>Forage Crops</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4360</td>
<td>Crop Pesticides and Growth Regulators</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4390</td>
<td>Soil Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 3950</td>
<td>Soil and Water Conservation</td>
<td>3 cr</td>
</tr>
<tr>
<td>RECLAM 3020</td>
<td>Reclamation Revegetation</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4370</td>
<td>Soil Physics</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4390</td>
<td>Soil Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3950</td>
<td>Soil and Water Conservation</td>
<td>3 cr</td>
</tr>
<tr>
<td>RECLAM 3020</td>
<td>Reclamation Revegetation</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**International Electives (3-12 credits):**

Students may select any International Education course not already used to fulfill the general education International requirement and/or a foreign language course beyond second semester.

MINORS

**Agribusiness Minor (24 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTING 2010</td>
<td>Financial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 2430</td>
<td>Agricultural Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3410</td>
<td>Agricultural Consulting and Sales</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3500</td>
<td>Agricultural Prices</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3460</td>
<td>Farm Management and Record Systems</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

The remaining credits are selected from agribusiness classes.
Animal Science Minor (24 credits)

**Required Courses (8 credits):**
- AGSCI 3000 Animal Nutrition 4 cr
- AGSCI 4110 Farm Animal Reproduction 4 cr

**One course from (4 credits):**
- AGSCI 4030 Beef Management 4 cr
- AGSCI 4040 Swine Management 4 cr
- AGSCI 4070 Dairy Cattle Management 4 cr

**One course from (3 credits):**
- AGSCI 2030 Introduction to Food Science 3 cr
- AGSCI 3010 Dairy Product Analysis and Processing 3 cr
- AGSCI 3040 Principles of Meat Science 3 cr

Electives to complete the minor

Ornamental Horticulture Minor (24 credits)

**Required Horticulture Courses (16 credits):**
- AGSCI 1240 The Plant-Soil Environment 3 cr
- AGSCI 2230 Soils 4 cr
- AGSCI 3360 Greenhouse Operation and Management 3 cr
  or
- AGSCI 3320 Landscape Management 3 cr
- BIOLOGY 4530 Plant Pathology 3 cr
- AGINDUS 4580 Agribusiness Internship 3 cr

**One Plant Identification Course (3-4 credits):**
- AGSCI 2280 Woody Landscape Plants 3 cr
  or
- BIOLOGY 3640 Plant Systematics 4 cr

**Electives (4-5 credits):**
- AGSCI 2280 Woody Landscape Plants* 3 cr
- AGSCI 3200 Pest Identification and Management 3 cr
- AGSCI 3220 Plant Development and Biotechnology 3 cr
- AGSCI 3230 Turfgrass Management 3 cr
- AGSCI 3240 Herbaceous Plants 2 cr
- AGSCI 3270 Landscape Design 3 cr
- AGSCI 3300 Fruit and Vegetable Production 3 cr
- AGSCI 3320 Landscape Management 3 cr
- AGSCI 3360 Greenhouse Operation and Management* 3 cr
- AGSCI 3370 Undergraduate Research in Ornamental Horticulture 1-3 cr
- AGSCI 3400 Special Topics in Ornamental Horticulture 1-3 cr
- AGSCI 4250 Weed Science 3 cr
- AGSCI 4340 Plant Physiology 3 cr
- BIOLOGY 3340 Entomology 4 cr
- BIOLOGY 3640 Plant Systematics 4 cr

* Cannot be used as an elective if used to fulfill a college or major requirement.

Soil and Crop Science Minor (24 credits)

**Required Courses (14 credits):**
- AGSCI 2230 Soils 4 cr
- AGSCI 3200 Pest Identification and Management 3 cr
- AGSCI 3310 Soils, Crops and Ornamental Horticulture Seminar 1 cr
- AGSCI 3340 Nutrient Management 3 cr
- AGSCI 3350 Soil Fertility and Fertilizers 3 cr

**Soil and Crop Science Electives (6-7 credits):**
- AGSCI 3220 Plant Development and Biotechnology 4 cr
- AGSCI 3260 Seed and Grain Crops 3 cr
- AGSCI 3300 Fruit and Vegetable Production 3 cr
- AGSCI 3330 Soil Morphology and Classification 3 cr
- AGSCI 3380 Special Problems in Soil Science 1-3 cr
- AGSCI 3390 Special Problems in Crop Science 1-3 cr
- AGSCI 4240 Plant Breeding Principles 3 cr
- AGSCI 4250 Weed Science 3 cr
- AGSCI 4320 Forage Crops 3 cr
- AGSCI 4340 Plant Physiology 3 cr
- AGSCI 4350 Soil and Water Conservation 3 cr
- AGSCI 4360 Crop Pesticides and Growth Regulators 3 cr
- AGSCI 4370 Soil Physics 3 cr
- AGSCI 4390 Soil Analysis 3 cr
- AGINDUS 3950 Soil and Water Conservation 3 cr

**Required Biology/Physical Sciences Course (3-5 credits):**
- BIOLOGY 1350 Botany 5 cr
- BIOLOGY 3240 Microbiology 4 cr
- BIOLOGY 3330 Principles of Genetics 3 cr
- BIOLOGY 3340 Entomology 4 cr
- BIOLOGY 3640 Plant Systematics 4 cr
- BIOLOGY 4530 Plant Pathology 3 cr
- GEOLOGY 1140 Physical Geology 4 cr
- GEOGRPHY 1040 Survey of Physical Geography 4 cr
- GEOGRPHY 1140 Geomorphology 4 cr
- GEOGRPHY 1240 Weather and Climate 4 cr
- GEOGRPHY 3840 Soil Geomorphology 4 cr

* Cannot be used as an elective if used to fulfill a college or major requirement.
Biotechnology Minor (29 credits)

**Required Courses (17 credits):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY 1650</td>
<td>Unity of Life</td>
<td>5 cr</td>
</tr>
<tr>
<td>BIOLOGY 2040</td>
<td>Cell Biology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3330</td>
<td>Genetics</td>
<td>3 cr</td>
</tr>
<tr>
<td><strong>or</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGSCI 3030</td>
<td>Genetics of Livestock Improvement</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3530</td>
<td>Biotechnology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 4520</td>
<td>Biotechnology Seminar</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

**Physiology Corequisite (3-4 credits):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3020</td>
<td>Anatomy and Physiology of Domestic Animals</td>
<td>4 cr</td>
</tr>
<tr>
<td><strong>or</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGSCI 4340</td>
<td>Plant Physiology</td>
<td>3 cr</td>
</tr>
<tr>
<td><strong>or</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOLOGY 4240</td>
<td>Advanced Physiology</td>
<td>4 cr</td>
</tr>
<tr>
<td><strong>or</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOLOGY 2240</td>
<td>Anatomy and Physiology II</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 2340</td>
<td>Essentials of Anatomy and Physiology</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

*Credits do not count toward completion of the minor.

**Tissue Culture Course(s) (2-6 credits):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3220</td>
<td>Plant Development and Biotechnology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3120</td>
<td>Animal Tissue Culture</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

**Electives (7-10 credits):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3070</td>
<td>Biotechnology in Animal Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGSCI 4110</td>
<td>Farm Animal Reproduction</td>
<td>4 cr</td>
</tr>
<tr>
<td>AGSCI 4190</td>
<td>Seminar in Animal Science and Biotechnology</td>
<td>2 cr</td>
</tr>
<tr>
<td>AGSCI 4240</td>
<td>Plant Breeding Principles</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3240</td>
<td>Microbiology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3620</td>
<td>Immunology</td>
<td>2 cr</td>
</tr>
<tr>
<td>BIOLOGY 4040</td>
<td>Molecular Biology</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 4610</td>
<td>Biochemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY 4630</td>
<td>Biochemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMISTRY 4830</td>
<td>Topics in Biochemistry</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Up to 3 credits from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 3370</td>
<td>Special Problems in Plant Biotechnology</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>BIOLOGY 4410</td>
<td>Topics in Biology</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>BIOLOGY 4520</td>
<td>Independent Research in Biology</td>
<td>1-3 cr</td>
</tr>
</tbody>
</table>

NOTE: Elective courses have individual pre-requisites that may not be listed above.
Purpose Statement

The Biology Program provides biology students a fundamental knowledge of biology along with introducing students to the major areas in biology, and providing opportunities to explore these areas. In this endeavor, the Biology Department provides students the ability to critically apply biological concepts to the understanding of natural phenomena and to deal with biology-related health, societal and conservation issues. In addition, the Biology Program prepares students for: advanced study and research in the biological and related sciences, healthcare professional programs, wildlife and forestry professional programs, veterinary professional programs, careers in education and biology-related industry and governmental service. The Biology Program also provides courses for general education in the natural sciences to introduce students to science, biology, biological concepts and how these affect society. Finally, the Biology Program provides courses to support other university programs such as Agriculture, Education, Physical Education, Chemistry, Criminal Justice and Engineering.

Overall Biology Program Student Learning Outcomes

1. Graduates will demonstrate a fundamental knowledge of biological concepts and the ability to apply these in the individual’s major program area.
2. Graduates will comprehend the scientific method and apply it in the understanding of the natural world.
3. Graduates will demonstrate effective written, oral and visual communication skills in a biological context.
4. Graduates will apply analytical and critical thinking skills to problems and issues in science and society and to the critical analysis and synthesis of biological literature.
5. Graduates will demonstrate skills and apply them in the proper use and care of equipment and specimens in the respective program areas.
6. Graduates will develop an appreciation and enthusiasm for science, especially biology, and develop a curiosity for the world around them.
7. Graduates seeking DPI certification in Biology Secondary Education will demonstrate the skills, knowledge and competencies for teaching biology.
8. Graduates seeking advanced professional degrees in healthcare and other areas will demonstrate skills, knowledge and competencies for acceptance and participation in professional programs.
9. Graduates seeking advanced graduate study and research will demonstrate the skills, knowledge and competencies for acceptance and participation in graduate programs.
10. Graduates seeking biology-related careers not initially requiring advanced study will demonstrate skills, knowledge and competencies to be competitive and to participate in their respective occupational areas.
Specific Biology Student Learning Outcomes

Through the Biology Department curriculum, students should:

Attitudes
1. appreciate science and especially biology. This appreciation should include how science and biology permeates our society and many other aspects of our lives.
2. develop a curiosity for the world around them. This curiosity should include not only “how does that work?” or “what is that bug” or “how are genes expressed,” but also “how do we know that?” or “how can we figure this out?”
3. develop respect for equipment and specimens or materials. Biologists depend on these things and the proper care and desire to care for them is critical.
4. develop an enthusiasm and motivation for biology and the sciences.
5. further develop integrity. This development would include integrity in scientific endeavors and communication such as the issues of plagiarism and “fudging data” in research.

Skills
1. be able to understand and apply the scientific method. Students need to understand what the process of science is and what it is not. In this light, students should respect its limitations.
2. develop and apply communication skills. These communication skills include being able to present in a logical, understandable fashion, ideas or information in written, oral and visual formats. These skills also include “people” or interpersonal skills. Our students should be able to present themselves in a positive and professional way when interacting with others.
3. develop and apply critical thinking skills. Students should then be able to apply these skills to problems and/or issues in science, nature and society. This would include critical analysis and synthesis associated with the examination of literature and other informational resources.
4. develop resourcefulness and inventiveness. Students should develop the means to be able to identify and utilize available, pertinent resources (including those within his/her own person) in solving problems, the scientific process and in dealing with societal issues.
5. develop creativity. This would include developing novel ideas and approaches to solving problems, dealing with issues and experimental approaches.
6. be able to integrate multiple disciplines in the practice of science. For example, biology depends on the fundamental understanding of many other disciplines including physics, chemistry, astronomy, geology and geography.
7. develop and apply skills for the proper use and care of equipment.

Knowledge
1. Hierarchy of Biological Structure - Students should be able to describe the hierarchy and illustrate how the hierarchical context relates to different organisms. Students should also be able to explain the relationships among the different levels of the hierarchy and how those interactions influence organisms. Lastly, students should be able to distinguish biological systems within the context of the hierarchy.
2. Evolution - Students should be able to summarize the concept of evolution and assess the role of evolution in biology. Students also should be able to integrate the concepts of natural selection and evolution. Lastly, students should be able to relate the diversity of life to evolution and natural selection.
3. Diversity of Life - Students should be able to differentiate various organisms according to their evolutionary relationships. Students should also be able to explain how and why systematic approaches are used to organize and understand the diversity of organisms. Lastly, students should be able to describe how the concept of species fits within the context of biology.
4. Ecology - Students should be able to illustrate the interrelationship among organisms and the interrelationships between organisms and the environment. Students should also be able to describe energy and nutrient cycles and infer how those cycles influence organisms and the environment. Lastly, students should be able to relate ecological concepts to various disciplines within biology.
5. Genetics - Students should be able to describe the structure and expression of genera. Students should also be able to demonstrate the role of inheritance in determining differences among individual organisms, populations and species. Lastly, students should be able to summarize the relationships among DNA, RNA and protein synthesis.
6. Cells - Students should be able to compare and contrast the structures and functions of various cell types. Students should also be able to illustrate the processes of mitosis and meiosis, as well as describe the roles these processes have in a biological context. Lastly, students should be able to explain and relate the concepts of cellular respiration and photosynthesis.
7. Properties of Life - Students should be able to summarize the properties that are expressed by all living things. Consequently, students should also be able to discriminate living entities from non-living entities. Lastly, students should be able to describe the theory of chemical evolution (i.e. the biological explanation of how life began on earth).
8. Energy - Students should be able to explain what energy is and the different forms of energy. Students should also be able to apply the 1st and 2nd Laws of Thermodynamics to the form and function of biological systems. Lastly, students should be able to relate the concepts of entropy and homeostasis.
9. Process of Science - Students should be able to collect, analyze, interpret, summarize and present biological data within the context of the scientific method. Students should also be able to distinguish between experimental and observational approaches and assess how each might be used to answer scientific questions. Students should also be able to integrate previous findings from scientific literature into both approaches. Lastly, students should be able to formulate testable hypotheses and assess the appropriate methods to test those hypotheses.
10. History of Science - Students should be able to relate historical contributions to science with the current approaches and knowledge base within biology. Students should also be able to describe the contributions of various individuals to the science of biology.
11. **Science and Society** - Students should be able to illustrate how biology relates to society. As citizens, students should also be able to make informed decisions about biological issues and policies. Lastly, students should be able to differentiate the means by which biology is communicated to society and assess the advantages and disadvantages of each.

12. **Bioethics** - Students should be able to identify and assess different positions associated with ethical issues in biology. Students should also be able to describe the role of ethics in their present and future biological careers. Lastly, students should be able to explain the impact and importance of ethics on science and biology.

**Biology Requirements (31 credits)**

Students majoring in biology may elect one of two routes. Students who have specific biology interests, plan on a particular biology career or those who plan to enter a graduate or professional school should select the comprehensive biology major with an area emphasis, thereby focusing their educational experiences. Students who seek a wider range of biology experiences than defined by an emphasis area may elect to not choose an emphasis area, instead creating their own set of electives that better align with their current or future interests.

**Required Biology Core Courses (19 credits):**

- **BIOLOGY 1020** BioQuest: Foundations for College Success 1 cr
- **BIOLOGY 1650** Unity of Life 5 cr
- **BIOLOGY 1750** Diversity of Life 5 cr
- **BIOLOGY 2420** FBI: Fundamentals of Biological Investigations 2 cr
- **BIOLOGY 3330** Genetics 3 cr
- **BIOLOGY 3450** Ecology and Evolution 3 cr

**Required Biology Capstone Experience (1 credit):**

- **BIOLOGY 4970** Senior Thesis 1 cr
- or
- **BIOLOGY 4990** From Atoms to Ecosystems: The Study of Life 1 cr

**Required Supporting Courses (11 credits):**

- **CHEMSTRY 1140** General Chemistry I 4 cr
- **CHEMSTRY 1240** General Chemistry II 4 cr
- **MATH 1830** Elementary Statistics 3 cr

A grade of “C” or higher is required in all biology courses counted toward a major in biology. Also, a grade of “C” or higher is required in **ENGLISH 1130, ENGLISH 1230, CHEMSTRY 1140, CHEMSTRY 1240 and MATH 1830**.

Students who expect to enter graduate or professional school should consider taking the following courses, beyond the requirements for the major that meet the needs of their respective interest areas:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH</td>
<td>2640</td>
<td>Calculus and Analytic Geometry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMSTRY</td>
<td>3540/3510</td>
<td>Organic Chemistry I and Lab</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMSTRY</td>
<td>3630/3610</td>
<td>Organic Chemistry II and Lab</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMSTRY</td>
<td>4630/4610</td>
<td>General Biochemistry and Lab</td>
<td>5 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>1050</td>
<td>Principles of Physics</td>
<td>5 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>1350</td>
<td>Introductory Physics I</td>
<td>5 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>1450</td>
<td>Introductory Physics II</td>
<td>5 cr</td>
</tr>
<tr>
<td>PSYCHLGY</td>
<td>1130</td>
<td>General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOCIOLGY</td>
<td>1130</td>
<td>Principles of Sociology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHLSPHY</td>
<td></td>
<td>(Courses in Philosophy)</td>
<td></td>
</tr>
</tbody>
</table>

**Biology Major (Non-emphasis) (45 credits)**

Biology majors must complete the Biology Requirements for 31 credits (see left column), plus:

**Two courses from (7-8 credits):**

- **BIOLOGY 2040** Cell Biology 4 cr
- **BIOLOGY 3240** Microbiology 4 cr
- **BIOLOGY 3460** Ecological Research and Methods 3 cr

**Electives to complete the major (7-8 credits):**

Students may select any biology course above the 2000 level (except BIOLOGY 4010 Workshop in BIOLOGY or 4660 Biology Internship Experience).

**Biology Comprehensive Major (minimum 60 credits including non-biology requirements)**

Biology majors must complete the Biology Requirements for 31 credits (see left column), plus one of the following emphases related to the student’s field of interest:

**Biohealth/Physiology Emphasis (33 credits)**

**Biohealth Emphasis Core Courses (12-16 credits):**

- **BIOLOGY 2040** Cell Biology 4 cr
- **BIOLOGY 3240** Microbiology 4 cr
- **BIOLOGY 2140** Anatomy and Physiology I 4 cr
- or **BIOLOGY 2340** Essentials of Anatomy and Physiology 4 cr
- **BIOLOGY 2240** Anatomy and Physiology II 4 cr

**Advanced Biohealth Electives (5-12 credits):**

If the BIOLOGY 2140, 2240 sequence is chosen above, then students will select two of the Advanced Biohealth Elective courses.

If BIOLOGY 2340 is chosen above, then students will select three of the Advanced Biohealth Elective courses.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY</td>
<td>3040</td>
<td>Comparative Anatomy of Vertebrates</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>3120</td>
<td>Animal Tissue Culture</td>
<td>2 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>3140</td>
<td>Vertebrate Embryology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>3530</td>
<td>Biotechnology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>3620</td>
<td>Immunology</td>
<td>2 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>4040</td>
<td>Molecular Biology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>4130</td>
<td>Mammalian Endocrinology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>4240</td>
<td>Advanced Physiology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>4340</td>
<td>Mammalian Histology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>4440</td>
<td>Human Gross Anatomy</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>4520</td>
<td>Biotechnology Seminar</td>
<td>2 cr</td>
</tr>
</tbody>
</table>
**Additional Required Supporting Courses (9 credits)**  
CHEMISTRY 3540/ Organic Chemistry I 5 cr  
CHEMISTRY 3510  
CHEMISTRY 4630/ Biochemistry 4 cr  
4610  

**Electives to complete the emphasis (3-4 credits):**  
Students may select any biology course above the 2000 level (except BIOLOGY 4010 Workshop in Biology).

**Recommended Minors:**  
Chemistry  
Biotechnology  
Psychology  
Math

**Botany Emphasis (29 credits)**

**One course from (4 credits):**  
BIOLOGY 2040 Cell Biology 4 cr  
BIOLOGY 3240 Microbiology 4 cr

**At least four advanced plant-based courses (min. 14 cr) from:**  
BIOLOGY 2130 Plants and Society 3 cr  
BIOLOGY 2450 Fungi, Algae and Bryophytes 4 cr  
BIOLOGY 3550 Morphology and Evolution of Vascular Plants 4 cr  
BIOLOGY 3640 Plant Systematics 4 cr  
BIOLOGY 3650 Plant Communities of Wisconsin 4 cr  
BIOLOGY 4150 Forensic Botany 4 cr  
BIOLOGY 4530 Plant Pathology 3 cr  
BIOLOGY 4920 Independent Research in Biology 1-3 cr (with approval)

AGSCI 3210 Identification of Landscape Plants 3 cr  
AGSCI 3220 Plant Development 3 cr  
AGSCI 4240 Plant Breeding Principles 3 cr  
AGSCI 4340 Plant Physiology 3 cr  
Approved Field Station course(s)

**Broad-based biology course(s) (min. 3 cr), to be selected from:**  
BIOLOGY 2040 Cell Biology 4 cr  
BIOLOGY 3460 Ecological Methods and Research 3 cr  
BIOLOGY 3240 Microbiology 4 cr  
BIOLOGY 3340 Molecular Biology 5 cr  
BIOLOGY 3550 Biotechnology 2 cr  
BIOLOGY 3750 Freshwater Biology 3 cr  
BIOLOGY 4410 Topics in Biology cr vary  
BIOLOGY 4710 Selected Regional Habitats cr vary  
Approved Field Station course cr vary

**Supporting Courses (min. 8 cr), to be selected from:**  
CHEMISTRY 3540/ Organic Chemistry I and Lab 5 cr  
3510  
CHEMISTRY 4630/ General Biochemistry and Lab 4 cr  
4610  
AGSCI 2230 Soils 3 cr  
GEOLOGY 1140 Physical Geology 4 cr  
GEOLOGY 1240 Historical Geology 4 cr  
GEOGRPHY 1040 Survey of Physical Geography 4 cr  
GEOGRPHY 1140 Geomorphology 4 cr  
GEOGRPHY 1240 Weather and Climate 4 cr  
GEOGRPHY 1340 Biogeography 4 cr  
GEOGRPHY 4120 Oceanography 4 cr  
Approved Field Station course cr vary

**Recommended Minors:**  
Environmental Science  
Chemistry  
Ornamental Horticulture  
Biotechnology  
Geology

**Cytotechnology Emphasis**

Ninety-three semester credits at UW-Platteville are required before application to the professional phase of the program, including a minimum of 20 credits in biology and a minimum of 8 credits in chemistry. BIOLOGY 2140 or 2340 and 4340 are strongly recommended. If accepted into the program, the final 36 credits are earned at the School of Cytotechnology, State Laboratory of Hygiene, Madison, Wisconsin. Please contact the biology chair for further information.

**Ecology Emphasis (32 credits)**

**Ecology Core Courses (7 credits):**  
BIOLOGY 3460 Ecological Methods and Research 3 cr  
BIOLOGY 2040 Cell Biology 4 cr  
BIOLOGY 3240 Microbiology 4 cr

**Advanced Ecology Courses (3 credits):**  
BIOLOGY 3750 Freshwater Biology 3 cr  
BIOLOGY 4710 Selected Regional Habitats 3 cr

**Advanced Organismal, Identification or Research Courses (12 credits):**  
BIOLOGY 2450 Fungi, Algae and Bryophytes 4 cr  
BIOLOGY 2640 Invertebrate Zoology 4 cr  
BIOLOGY 3030 Ornithology 3 cr  
BIOLOGY 3040 Comparative Anatomy of Vertebrates 4 cr  
BIOLOGY 3230 Mammalogy 3 cr  
BIOLOGY 3240 Microbiology 4 cr  
BIOLOGY 3340 Entomology 4 cr  
BIOLOGY 3550 Morphology and Evolution of Vascular Plants 4 cr  
BIOLOGY 3640 Plant Systematics 4 cr  
BIOLOGY 3650 Plant Communities of Wisconsin 4 cr  
BIOLOGY 3660 Animal Communities of Wisconsin 4 cr  
BIOLOGY 4530 Plant Pathology 3 cr  
BIOLOGY 4410 Topics in Biology 1-3 cr  
BIOLOGY 4660 Biology Internship Experience† 1-6 cr  
BIOLOGY 4920 Independent Research in Biology† cr vary  
BIOLOGY 3### Ichthyology*  
BIOLOGY 3### Herpetology*  

**Non-Biology Supporting Courses (min. 10 credits) from:**  
CHEMISTRY 3110 Environmental Chemistry Lab 1 cr  
CHEMISTRY 3130 Environmental Chemistry 3 cr

**NOTE:** Any of the courses above may also be taken at an accredited field station (ex. Pigeon Lake) with departmental approval.

† No more than 4 credits of any combination of these courses can be applied to the required 12 credits.

* Course may not be offered at UWP
CHEMISTRY 3510 Organic Chemistry Lab 1 cr
CHEMISTRY 3540 Organic Chemistry 4 cr
GEOGRAPHY 2230 Cartography and Graphics 3 cr
GEOGRAPHY 3230 Geographic Information Systems 3 cr
or
RECLAM 3010 Current Topics in Reclamation* 2 cr
CIVILENG 4630 Geographic Information Systems* 3 cr

* This option requires instructor consent for both courses

PHYSICS 1050 Principles of Physics 5 cr
or
PHYSICS 1140/ Introductory Physics I 5 cr
1110
PHYSICS 1240/ Introductory Physics II 5 cr
1210

Students are strongly encouraged to participate in a cooperative experience or internship (BIOLOGY 4660).

Recommended Minors:
Environmental Science
Geology
Biotechnology
Chemistry

Molecular/Genetics Emphasis (33 credits)

Molecular/Genetics Core Courses (13 credits):
BIOLOGY 2040 Cell Biology 4 cr
BIOLOGY 3240 Microbiology 4 cr
BIOLOGY 4040 Molecular Biology 5 cr

Required Advanced Molecular/Genetics Courses (8 credits):
BIOLOGY 2140 Anatomy and Physiology I 4 cr
BIOLOGY 2240 Anatomy and Physiology II 4 cr
BIOLOGY 2340 Essentials in Anatomy and Physiology 4 cr
BIOLOGY 3040 Comparative Anatomy 4 cr
BIOLOGY 3120 Animal Tissue Culture 2 cr
BIOLOGY 3140 Vertebrate Embryology 4 cr
BIOLOGY 3530 Biotechnology 3 cr
BIOLOGY 3620 Immunology 2 cr
BIOLOGY 4130 Mammalian Endocrinology 3 cr
BIOLOGY 4150 Forensic Botany 4 cr
BIOLOGY 4240 Advanced Physiology 4 cr
BIOLOGY 4340 Mammalian Histology 4 cr
BIOLOGY 4530 Plant Pathology 3 cr
BIOLOGY 4520 Biotechnology Seminar 2 cr
AGSCI 3220 Plant Development 3 cr
AGSCI 4240 Plant Breeding Principles 3 cr
AGSCI 4340 Plant Physiology 3 cr
GENENG 4000 Nanotechnology 3 cr

Additional Required Supporting Courses (9 credits)
CHEMISTRY 3540/ Organic Chemistry I and Lab 5 cr
CHEMISTRY 4630/ Biochemistry 4 cr
4610
Eelectives to complete the emphasis (3 credits):
Students may select any biology course above the 2000 level (except BIOLOGY 4010).

Recommended Minors:
Chemistry
Biotechnology
Biotechnology
Criminal Justice

Secondary Education Emphasis (20-24 credits)

Note: Biology-Secondary Education majors must earn a minimum GPA of 2.75 in the major course work.

Secondary Education Emphasis Core Courses (12-16 credits):
BIOLOGY 2040 Cell Biology 4 cr
BIOLOGY 3240 Microbiology 4 cr
BIOLOGY 2340 Essentials of Anatomy and Physiology (recommended)
or
BIOLOGY 2140/ Anatomy and Physiology I and II 8 cr
2240

One advanced plant course (min. 3 credits) from:
BIOLOGY 2130 Plants and Society 3 cr
BIOLOGY 2450 Fungi, Algae and Bryophytes 4 cr
BIOLOGY 3550 Morphology and Evolution of Vascular Plants 4 cr
BIOLOGY 3640 Plant Systematics 4 cr
BIOLOGY 3650 Plant Communities of Wisconsin 4 cr
AGSCI 3210 Identification of Landscape Plants 3 cr
AGSCI 4340 Plant Physiology 4 cr
An approved course at a field station – cr vary

One advanced animal course (min. 3 credits) from:
BIOLOGY 2640 Invertebrate Zoology 4 cr
BIOLOGY 3030 Ornithology 3 cr
BIOLOGY 3040 Comparative Anatomy of Vertebrates 4 cr
BIOLOGY 3140 Vertebrate Embryology 4 cr
BIOLOGY 3340 Entomology 4 cr
BIOLOGY 3230 Mammalogy 3 cr
BIOLOGY 3660 Animal Communities of Wisconsin 3 cr
BIOLOGY 4130 Mammalian Endocrinology 3 cr
BIOLOGY 4240 Advanced Physiology 4 cr
BIOLOGY 4340 Mammalian Histology 4 cr
An approved course at a field station - cr vary

One advanced broad-based biology course (min. 2 credits) from:
BIOLOGY 3460 Ecological Methods and Research 3 cr
BIOLOGY 3530 Biotechnology 3 cr
BIOLOGY 3750 Freshwater Biology 3 cr
BIOLOGY 4040 Molecular Biology 4 cr
BIOLOGY 4410 Topics in Biology 1-3 cr
(advisor approval required)
BIOLOGY 4710 Selected Regional Habitats 1-3 cr
BIOLOGY 4920 Independent Research in Biology 1-3 cr

Additional Licensable Program (Required)

Biology-Secondary Education majors are required to earn an additional licensable degree. Although students are free to select any licensable major or minor offered at UWP, the Biology Department encourages students to pursue a science-related program to improve marketability. To this end, students may choose to minor in Physics, Chemistry or Environmental Science or double major in Chemistry or Broad Field Science.

Zoology Emphasis (33 credits)

One course (4 credits):
BIOLOGY 2040 Cell Biology 4 cr
BIOLOGY 3240 Microbiology 4 cr

Anatomy and Physiology Courses (8 credits):
BIOLOGY 2340 Essentials of Anatomy and Physiology 4 cr and
BIOLOGY 3040 Comparative Anatomy 4 cr
or
BIOLOGY 2140 Anatomy and Physiology I 4 cr and
BIOLOGY 2240 Anatomy and Physiology II 4 cr

Zoology Electives (9 credits):
BIOLOGY 2640 Invertebrate Zoology 4 cr
BIOLOGY 3030 Ornithology 3 cr
BIOLOGY 3120 Animal Tissue Culture 2 cr
BIOLOGY 3140 Vertebrate Embryology 4 cr
BIOLOGY 3230 Mammalogy 3 cr
BIOLOGY 3340 Entomology 4 cr
BIOLOGY 3620 Immunology 2 cr
BIOLOGY 4130 Mammalian Endocrinology 4 cr
BIOLOGY 4340 Mammalian Histology 4 cr
BIOLOGY 3### Herpetology* 2 cr
BIOLOGY 3### Ichthyology* cr vary
Approved Field Station Course(s) – cr vary

* Not currently offered on campus; may be taken from an accredited field station or other accredited program.

Additional Required Supporting Courses (12 credits):
BIOLOGY 4410 Topics in Biology 1-3 cr
BIOLOGY 4660 Cooperative Field Experience 1-3 cr
BIOLOGY 4710 Selected Regional Habitats 1-3 cr
BIOLOGY 4920 Special Problems in Biology 1-3 cr

(No more than 6 credits of any combination of the above courses can be applied to the required 12 credits.)

AGSCI 1000 Introduction to Animal Science 3 cr
AGSCI 3000 Animal Nutrition 4 cr
AGSCI 3020 A and P of Domestic Animals 3 cr
AGSCI 3070 Biotechnology in Animal Science 3 cr
AGSCI 3120 Topics in Animal Health 3 cr
CHEMSTRY 3510 Organic Chemistry Laboratory 1 cr
CHEMSTRY 3540 Organic Chemistry Lecture 4 cr
GEOLOGY 1240 Historical Geology 4 cr
GEOGRPHY 1040 Survey of Physical Geography 4 cr
GEOGRPHY 1140 Geomorphology 4 cr
GEOGRPHY 1330 Biogeography 4 cr
GEOGRPHY 4120 Oceanography 4 cr

Biology Minor (24 credits)

Required Courses (13 credits):
BIOLOGY 1650 Unity of Life 5 cr
BIOLOGY 1750 Diversity of Life 5 cr
BIOLOGY 3330 Genetics 3 cr
or
BIOLOGY 3450 Ecology and Evolution 3 cr

Electives to Complete the Minor (11 credits): Students may select any biology course above the 2000 level (except BIOLOGY 4010, 4410, 4660 or 4920).

Biotechnology Minor (29 credits)

Required Courses (17 credits):
BIOLOGY 1650 Unity of Life 5 cr
BIOLOGY 2040 Cell Biology 4 cr
BIOLOGY 3330 Genetics 3 cr
or
AGSCI 3030 Genetics of Livestock Improvement 3 cr
BIOLOGY 3530 Biotechnology 3 cr
BIOLOGY 4520 Biotechnology Seminar 2 cr

Physiology Corequisite (3-4 credits)*:
AGSCI 3020 Anatomy and Physiology of Domestic Animals 4 cr
or
AGSCI 4340 Plant Physiology 3 cr
or
BIOLOGY 4240 Advanced Physiology 4 cr
or
BIOLOGY 2240 Anatomy and Physiology II 4 cr
BIOLOGY 2340 Essentials of Anatomy and Physiology 4 cr

*Credits do not count toward completion of the minor.

Tissue Culture Course(s) (2-5 credits):
AGSCI 3220 Plant Development and Biotechnology 4 cr
BIOLOGY 3120 Animal Tissue Culture 2 cr

Electives to Complete Minor (7-10 credits):
AGSCI 3070 Biotechnology in Animal Science 3 cr
AGSCI 4110 Farm Animal Reproduction 4 cr
AGSCI 4190 Seminar in Animal Science and Biotechnology 2 cr
AGSCI 4240 Plant Breeding Principles 3 cr
BIOLOGY 3240 Microbiology 4 cr
BIOLOGY 3620 Immunology 2 cr
BIOLOGY 4040 Molecular Biology 4 cr
CHEMSTRY 4610 Biochemistry Lab 1 cr
CHEMSTRY 4630 Biochemistry 3 cr
CHEMSTRY 4830 Topics in Biochemistry 3 cr

Up to 3 credits from:
AGSCI 3370 Special Problems in Plant Biotechnology 1-3 cr
BIOLOGY 4410 Topics in Biology (applicable to Biotechnology) 1-3 cr
BIOLOGY 4920 Independent Research in Biology 1-3 cr

NOTE: Elective Courses have individual pre-requisites that may not be listed above.
## Pre-Professional Programs

The following pre-professional programs are administered and advised through the Biology Department:

<table>
<thead>
<tr>
<th>Program</th>
<th>Advisor</th>
<th>Office</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Chiropractic</td>
<td>Wayne Weber</td>
<td>262 Gardner</td>
<td>608.342.1611</td>
</tr>
<tr>
<td>Pre-Cytotechnology</td>
<td>Esther Ofulue</td>
<td>250 Gardner</td>
<td>608.342.1331</td>
</tr>
<tr>
<td>Pre-Dentistry</td>
<td>Wayne Weber</td>
<td>262 Gardner</td>
<td>608.342.1611</td>
</tr>
<tr>
<td>Pre-Medical Technology</td>
<td>Esther Ofulue</td>
<td>250 Gardner</td>
<td>608.342.1331</td>
</tr>
<tr>
<td>Pre-Medicine</td>
<td>Amanda Trewin</td>
<td>255 Gardner</td>
<td>608.342.1527</td>
</tr>
<tr>
<td>Pre-Nursing</td>
<td>Amanda Trewin</td>
<td>255 Gardner</td>
<td>608.342.1527</td>
</tr>
<tr>
<td>Pre-Occupational Therapy</td>
<td>Marilyn Tuftte</td>
<td>253 Gardner</td>
<td>608.342.1664</td>
</tr>
<tr>
<td>Pre-Optometry</td>
<td>Wayne Weber</td>
<td>262 Gardner</td>
<td>608.342.1611</td>
</tr>
<tr>
<td>Pre-Osteopathy</td>
<td>Amanda Trewin</td>
<td>255 Gardner</td>
<td>608.342.1527</td>
</tr>
<tr>
<td>Pre-Physician Assistant</td>
<td>Wayne Weber</td>
<td>262 Gardner</td>
<td>608.342.1611</td>
</tr>
<tr>
<td>Pre-Physical Therapy</td>
<td>Marilyn Tuftte</td>
<td>253 Gardner</td>
<td>608.342.1664</td>
</tr>
<tr>
<td>Pre-Podiatry</td>
<td>Amanda Trewin</td>
<td>255 Gardner</td>
<td>608.342.1527</td>
</tr>
</tbody>
</table>

The descriptions of these programs are listed under the Special Academic Programs section. Program fact sheets are available in the Biology Department Office or from the department chair.
**DEPARTMENT OF BUSINESS AND ACCOUNTING**

www.uwplatt.edu/busacctng

---

**Department Chair:** Stephen W. Kleisath  
**Office:** 1111 Ullsvik Hall  
**Phone:** 608.342.1460  
**E-mail:** kleisath@uwplatt.edu

**Professors:**  
John C. Borke  
Robert C. Conway  
Robert A. Fidrych  
Roxane Gunser  
Susan L. Hansen  
Margaret F. Karsten  
Stephen W. Kleisath  
Louis Nzegwu  
Donna J. Perkins  
Machelle Schroeder  
Scott A. White

**Associate Professors:**  
Bernard W. Harris

**Assistant Professors:**  
Wendy Brooke  
Sharif Gias  
John Hammermeister  
Syed M. Moiz  
Thomas Steinback

**Lecturers:**  
Thomas J. Pavick  
James J. Jarrard

**Academic Department Associate:**  
LaVon Blum

---

**About the Department and Major**

The Department of Business and Accounting educates undergraduates for productive careers in a diverse, global business environment. Students pursuing a Bachelor of Science in Business Administration or in Accounting, the two majors that the department offers, may begin learning about business-related subjects in their first year of college. Students are urged to participate in the department’s active student organizations. For students interested in Accounting, there is Beta Alpha. For those interested in business, there is the Pioneer Investment Club, and student chapters of the Society for the Advancement of Management (SAM), the Society for Human Resource Management (SHRM) and UWP Collegiate Entrepreneur Organization (CEO). Go to www.uwplatt.edu/busacctng/org for more information on these organizations.

The Accounting major is designed to prepare students for careers in public accounting, industry or governmental agencies. Students completing the requirements of the major are qualified to take the certified management accountant (CMA) examination and, after completion of 150 hours of college credit, the certified public accountant (CPA) examination.

Internships that have the prior approval of either the department internship coordinator or chairperson are required for Business Administration majors and Accounting majors.

Because they will interact with people worldwide during their careers, Business and Accounting students are urged to increase their exposure to and awareness of various nations and cultures. The university provides many ways in which they can do this including exchange programs and an acclaimed study abroad program. For those who are uncomfortable with going overseas but wish to have an experience away from UW-Platteville, we have a domestic exchange. In this program the student can spend a semester studying at over 500 schools in the United States and Canada.

---

**Mission Statement**

The Department of Business and Accounting educates students for productive careers in a global business environment. We:

- provide excellent academic advising;
- develop students’ critical thinking skills through experiential learning activities, including internships;
- integrate the use of technology into our courses;
- cultivate a learning environment that encourages teamwork and enhances students’ leadership skills;
- enhance in our students a sense of ethics, a global perspective to business, an entrepreneurial spirit and a sensitivity to workplace and societal diversity;
- offer a variety of opportunities for participation in student organizations;
- extend our Business Administration degree to students worldwide via distance education;
- pursue scholarly and professional activities that enhance our teaching and students’ learning; and
- provide service in our areas of expertise to businesses and nonprofit organizations in the local community, region and state and involve our students in such endeavors.
Desired Student Outcomes - Business Administration

Students who earn a B.S. in Business Administration from the University of Wisconsin-Platteville should:

1. have a basic knowledge of accounting, economics, marketing, management, computer applications, finance, human resource management and legal, social and international issues affecting business;
2. communicate effectively verbally and in writing;
3. develop effective interpersonal skills that will enable them to work with other individuals and within teams as either leaders or participants;
4. know how to gather, use and critically evaluate electronic and other information;
5. enhance their understanding of and sensitivity to diversity in the workplace;
6. develop a knowledge and appreciation of ethical principles as applied to business;
7. use critical thinking skills to solve real or hypothetical business problems; and
8. have had experiences that cultivate or enhance an entrepreneurial spirit.

Desired Student Outcomes - Accounting

Students who earn a B.S. in Accounting from the University of Wisconsin-Platteville should:

1. possess the technical knowledge in financial accounting, management accounting, tax and auditing that is necessary to be successful in their careers;
2. possess the broad understanding of the related subject matter (economics, marketing, management, computer applications, finance, human resource management, business law, business ethics) needed to be successful in the business world;
3. possess effective interpersonal skills and the ability to communicate effectively verbally and in writing;
4. possess enough familiarity with computer applications to be able to learn quickly the specific accounting applications which they may encounter in their careers;
5. be able to obtain and retain accounting positions upon graduation and be successful in those positions.

Professional Certifications

Upon graduation, accounting majors typically pursue professional certifications. In addition to the CPA and CMA certifications noted above, accountants also may become Certified Internal Auditors (CIAs). All professional certifications require individuals to pass a national examination and complete several years of professional practice.

Most states have changed the education standards that individuals who wish to take the CPA examination must meet. Typically, applicants must have completed 150 hours of college credit.

UW-Platteville graduates majoring in accounting have several attractive options for meeting the 150 credit hour requirement. These include:

- Earning a Business Administration major with an emphasis in an area complementary to Accounting, such as Finance, Computer Science or Management before graduation;
- Completing a Master of Science degree in Project Management from UW-Platteville online after graduation on a part- or full-time basis;
- Working one-on-one with an Accounting faculty member to devise a plan specifically tailored to a particular student’s interests; or
- Completing a Master of Business Administration degree after graduation as a part- or full-time student.

General Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for Graduation</td>
<td>120 credits</td>
</tr>
<tr>
<td>General Education</td>
<td>43-56 credits</td>
</tr>
<tr>
<td>Major Studies</td>
<td>60-63 credits</td>
</tr>
</tbody>
</table>

Required Core Courses (51 credits):

- **ACCTING 2010** Financial Accounting 3 cr
- **ACCTING 2020** Management Accounting 3 cr
- **ACCTING 3010** Intermediate Accounting I 3 cr
- **ACCTING 4990** Internship 3 cr
- **BUSADMIN 4990** Internship 3 cr
- **BUSBADM 1300** Global Business 3 cr

(Requires GE international requirement)

- **BUSADMIN 2330** Leadership and Management 3 cr
- **BUSADMIN 2630** Introduction to Marketing 3 cr
- **BUSADMIN 3030** Human Resource Management 3 cr
- **BUSADMIN 3130** Legal Environment of Business 3 cr
- **BUSADMIN 3140** Managerial Law 3 cr
- **BUSADMIN 3620** Financial Management 3 cr
- **BUSADMIN 4840** Business Policy and Strategy 3 cr
- **COMMNCTN 3010** Business Communication 3 cr
- **COMPUTER 1830** Microcomputer Applications 3 cr
- **ECONOMIC 2130** Principles of Macroeconomics 3 cr
- **ECONOMIC 2230** Principles of Microeconomics 3 cr
- **ECONOMIC 2410** Interpretation of Business and Economic Data 3 cr

Distance Education Degree

Program in Business Administration

Toll-free phone in U.S.: 1.800.362.5460
Website: www.uwplatt.edu/disted

The department offers a Bachelor of Science degree in Business Administration at a distance. The program allows adults to balance work and personal commitments with their educational goals. The degree delivered at a distance is the same degree that students earn on campus. Students may choose to take online or print courses, and no campus attendance is required. Courses are taught by experienced faculty who guide students’ work.

Online courses are offered in the fall, spring and summer semesters (for rotation schedules, please visit the website) and they emphasize student interaction. Print courses feature self-paced study, and students may register for print courses any working day of the year.

For further information, go to www.uwplatt.edu/disted/degrees/bsad/index.html or call our toll free number 1.800.362.5460.
Required Accounting Courses (27 credits):

- ACCTING 3020 Intermediate Accounting 3 cr
- ACCTING 3040 Federal Income Tax 3 cr
- ACCTING 3050 Advanced Accounting 3 cr
- ACCTING 3230 Cost Accounting 3 cr
- ACCTING 4040 Advanced Taxation 3 cr
- ACCTING 4130 Advanced Cost Accounting 3 cr
- ACCTING 4230 Auditing 3 cr

Two courses from:

- ACCTING 3030 Accounting Information Systems 3 cr
- ACCTING 3530 Budgets and Budgetary Control 3 cr
- ACCTING 4240 Auditing II 3 cr
- ACCTING 4520 Accounting Theory 3 cr

Mathematics requirement:

- MATH 2630 Calculus with Applications 3+ cr

Additional requirements:

- a. At least 40 percent of a student’s total credits at UW-Platteville must be in areas outside of accounting and business.
- b. Students must have GPAs of 2.50 or better in accounting and business courses to graduate in the major.
- c. Satisfactory completion of an approved accounting or business internship is required.

Business Administration Major

The major includes required courses in the core and completion of an emphasis area. An internship is also required to complete the major.

Required Core Courses (48 credits):

- BUSADMIN 1300 Global Business 3 cr
  (Meets international requirement in general education)
- BUSADMIN 2330 Leadership and Management 3 cr
- BUSADMIN 2630 Introduction to Marketing 3 cr
- BUSADMIN 3030 Human Resource Management 3 cr
- BUSADMIN 3130 Legal Environment of Business 3 cr
- BUSADMIN 3620 Financial Management 3 cr
- BUSADMIN 4840 Business Policy/Strategy 3 cr
- BUSADMIN 4990 Internship 3 cr
- ACCTING 2010 Financial Accounting 3 cr
- ACCTING 2020 Management Accounting 3 cr
- ACCTING 3000 Accounting Issues for Managers 3 cr
  or
- ACCTING 3010 Intermediate Accounting 3 cr
  or
- ACCTING 3230 Cost Accounting 3 cr
- COMMNCTN 3010 Business Communication 3 cr
- COMPUTER 1830 Microcomputer Applications 3 cr
- ECONOMIC 2130 Principles of Macroeconomics 3 cr
  (Meets social science credits in general education)
- ECONOMIC 2230 Principles of Microeconomics 3 cr
  (Meets social science credits in general education)
- ECONOMIC 2410 Interpretation of Business and Economic Data 3 cr

Finance Emphasis (15 credits)

Required Courses (9 credits):

- BUSADMIN 3710 Bank Management 3 cr
- BUSADMIN 3930 Investments 3 cr
- BUSADMIN 4030 Financial Decision Making 3 cr

Electives (6 credits):

- AGINDUS 3530 Agricultural Commodity Marketing 3 cr
- BUSADMIN 3150 Principles of Real Estate 3 cr
- BUSADMIN 3430 Risk Management 3 cr
- BUSADMIN 3640 Financial Systems Analysis 3 cr
- BUSADMIN 4130 Security Analysis 3 cr

Food Marketing Emphasis (15 credits)

Required Courses (9 credits):

- BUSADMIN 3120 Retailing 3 cr
- BUSADMIN 3740 Consumer Behavior 3 cr
- BUSADMIN 4990 Internship 3 cr
  (must be in food or grocery distribution)
  or
- AGINDUS 4580 Agricultural Business Internship 3 cr
- AGSCI 2030 Introduction to Food Science 3 cr

Electives (6 credits, one course from each list):

One course from:

- BUSADMIN 3630 Advertising 3 cr
- BUSADMIN 3820 Professional Selling 3 cr

One course from:

- BUSADMIN 3530 Organizational Behavior 3 cr
- BUSADMIN 3540 Quality Management 3 cr

Human Resource Management Emphasis

(15 credits)

Required Courses (6 credits):

- BUSADMIN 3100 Compensation Management 3 cr
- BUSADMIN 4200 Employee Recruitment and Selection 3 cr

Electives (9 credits):

- BUSADMIN 3330 Labor Law 3 cr
- BUSADMIN 3340 Management, Gender and Race 3 cr
  (Meets GE Gender and Race requirement)
- BUSADMIN 3450 Employment Law 3 cr
- BUSADMIN 3500 Employee Training and Development 3 cr
- BUSADMIN 3540 Quality Management 3 cr
- BUSADMIN 4330 Labor Management Relations 3 cr
- INDUSTDY 2710 Principles of Industrial Safety 3 cr
- INDUSTDY 3610 Safety and Worker Compensation Laws 3 cr
- PSYCHLGY 3010 Industrial Psychology 3 cr
Management Emphasis (15 credits)

BUSADMIN 3230 Small Business Management 3 cr
BUSADMIN 3530 Organizational Behavior 3 cr
BUSADMIN 3540 Quality Management 3 cr
BUSADMIN 3600 Regulatory Compliance Management 3 cr
BUSADMIN 4100 Supply Chain Management 3 cr
BUSADMIN 4110 Management Science 3 cr
BUSADMIN 4120 Operations Management 3 cr
BUSADMIN 4140 International Management 3 cr

Sales and Marketing Communications Emphasis (15 credits)

Required Courses (6 credits):
BUSADMIN 3700 Marketing Research 3 cr
BUSADMIN 4630 Marketing Management 3 cr

OPTIONS: Select a minimum of 9 credits in one of the two options. Each area has a required course.

(A) Advertising and Promotion
BUSADMIN 3110 Integrated Marketing 3 cr
BUSADMIN 3120 Retailing 3 cr
BUSADMIN 3630 Advertising (required) 3 cr
BUSADMIN 3720 International Marketing 3 cr
BUSADMIN 3740 Consumer Behavior 3 cr
COMMNCTN 2360 Public Relations Principles 3 cr
COMMNCTN 3920 Promotional Techniques 3 cr

(B) Sales Techniques
BUSADMIN 3720 International Marketing 3 cr
BUSADMIN 3740 Consumer Behavior 3 cr
BUSADMIN 3820 Professional Selling (required) 3 cr
BUSADMIN 3830 Sales Management 3 cr
SPEECH 3250 Interpersonal Communication 3 cr
SPEECH 3500 Persuasion and Argumentation 3 cr

Applied Management Emphasis

Required Courses:
BUSADMIN 3530 Organizational Behavior 3 cr
or
BUSADMIN 3540 Quality Management 3 cr
BUSADMIN 4110 Management Science 3 cr
or
BUSADMIN 4120 Operations Management 3 cr

To complete this concentration, a second major or a minor that can be neither the business minor nor the ones designed for education majors must be completed.

Computer Science Emphasis (18 credits)

Required Courses (6 credits):
COMPUTER 1430 Programming in C++ 3 cr
COMPUTER 2230 Programming in Cobol 3 cr

Electives (12 credits):
COMPUTER 2340 Programming in Visual Basic 3 cr
COMPUTER 2430 Object-Oriented Programming and Data Structures I 3 cr
COMPUTER 2830 Advanced Microcomputer Applications 3 cr
COMPUTER 3130 Systems Analysis and Design 3 cr
COMPUTER 3340 Windows Programming 3 cr
COMPUTER 3530 Systems Development and Implementation 3 cr
COMPUTER 3630 Database Design and Implementation 3 cr
COMPUTER 3930 CICS Application Programming 3 cr
COMPUTER 4230 Applications in Information Systems 3 cr

International Business Emphasis

Required Courses (21 credits):
BUSADMIN 3720 International Marketing 3 cr
BUSADMIN 4140 International Management 3 cr

Either:
SPEECH 2300 Intercultural Communication 3 cr
or
POLISCI 3030 International Relations 3 cr

12-credit Study Abroad experience which includes 6 credits of pre-approved business courses. (Consult with international coordinator.)

General Business Emphasis (15 credits)

Select 15 credits from any 3000 or 4000 level Business Administration courses, not in the core, in consultation with an advisor. Courses selected must have a BUSADMIN prefix.

Additional Requirements:
1. At least 40 percent of a student’s total credits at UW-Platteville must be in areas outside of accounting and business.
2. Students must have GPAs of 2.25 in all courses required for the Business Administration major.
3. Students majoring in business administration must complete BUSADMIN 4990 for 3 credits. If a student taking an internship from another department wishes to fulfill the 3 credit internship requirement of business or accounting, it must be pre-approved by a business and accounting Internship Coordinator and signed off by the Business and Accounting Department chairperson.
MINORS

Accounting Minor (24 credits)

Required Courses:
ACCTING 2010  Financial Accounting  3 cr
ACCTING 2020  Management Accounting  3 cr
ACCTING 3010  Intermediate Accounting I  3 cr
ACCTING 3040  Federal Income Tax  3 cr
ACCTING 3230  Cost Accounting  3 cr
ACCTING  ####  Accounting Electives  9 cr

Business Administration Minor
(24 Credits)
At least 12 credits must be taken at UW-Platteville.

Required Courses:
ACCTING 2010  Financial Accounting  3 cr
BUSADMIN 1300  Global Business  3 cr
BUSADMIN 2330  Leadership and Management  3 cr
BUSADMIN 2630  Introduction to Marketing  3 cr
BUSADMIN  ####  Business Administration electives which must have the BUSADMIN prefix 12 cr (BUSADMIN 4990 Internship cannot be used.)

Food Marketing Minor (24 credits)

Required Courses:
BUSADMIN 2630  Introduction to Marketing  3 cr
or
AGINDUS 2430  Agricultural Marketing  3 cr
AGSCI 2030  Introduction to Food Service  3 cr
BUSADMIN 3740  Consumer Behavior  3 cr
BUSADMIN 4990  Internship (In food related area)

or
AGINDUS 4580  Internship (In food related area)
Electives (12 credits):
BUSADMIN 3120  Retailing  3 cr
BUSADMIN 3530  Organizational Behavior  3 cr
BUSADMIN 3540  Quality Management  3 cr
BUSADMIN 3630  Advertising  3 cr
BUSADMIN 3820  Professional Selling  3 cr
or
AGINDUS 3410  Agricultural Consulting and Sales  3 cr
BUSADMIN 4630  Marketing Management  3 cr
or
AGINDUS 4330  Agribusiness Marketing Managements  3 cr
AGINDUS 2500  Producer and Consumer Cooperatives  3 cr
AGSCI 3040  Principles of Meat Science  3 cr
or
AGSCI 3010  Dairy Product Analysis and Processing  3 cr
AGSCI 3300  Fruit and Vegetable Production  3 cr
COMMNCTN 3010  Business Communication  3 cr

CERTIFICATES

The department offers certificates for those who wish to gain specialized expertise in an area but who do not plan to seek a degree. Certificates are primarily intended for those completing business courses at a distance.

Requirements for all certificates are:
Student must earn a grade of “C” or better in each course required in the certificate.

All courses must be taken under the direction of University of Wisconsin-Platteville faculty. Transferred courses and course substitutions are not allowed.

It shall be the student's responsibility to request a certificate from the department within one year upon completion of the final course in the certificate.

Human Resource Management Certificate (9 credits)
BUSADMIN 3030  Human Resource Management  3 cr
BUSADMIN 3100  Compensation Management  3 cr
BUSADMIN 4200  Employee Recruitment and Selection  3 cr

International Business Certificate (9 credits)
BUSADMIN 1300  Global Business  3 cr
BUSADMIN 3650/5650 (online)  International Financial Management  3 cr
BUSADMIN 3720/5720  International Marketing  3 cr

Leadership and Human Performance Certificate (9 credits)
BUSADMIN 2330  Leadership and Management  3 cr
BUSADMIN 3530  Organizational Behavior  3 cr
BUSADMIN 3540  Quality Management  3 cr

Marketing (9 credits)
BUSADMIN 2630  Introduction to Marketing  3 cr
BUSADMIN 4630  Marketing Management  3 cr
and either
BUSADMIN 3740  Consumer Behavior  3 cr
or
BUSADMIN 3120  Retailing  3 cr
Department of Communication Technologies

Department Chair: Arthur L. Ranney
Office: 609 Pioneer Tower
Phone: 608.342.1627
E-mail: ranneya@uwplatt.edu

Professors:
- Arthur L. Ranney
- B.J. Reed

Associate Professors:
- Rob Snyder
- Mary Rose Williams

Assistant Professors:
- Sang Um Nam
- Steve Yunck

Lecturer:
- Dave Meinhardt

Academic Department Associate:
- Becky Troy

Major
Communication Technologies
- Broadcast Production Emphasis
- Imaging Media Emphasis
- Journalism Emphasis
- Public Relations Emphasis

Minors
- Broadcasting
- Imaging Media
- Journalism
- Public Relations

About the Department and Major
Communication Technologies offers a comprehensive major (60 credits) or a major and minor combination (36 credits and 24 credits, respectively).

The programs are designed to promote a natural transition from the classroom to the world of work. This transition is enhanced by a unique balance of classroom instruction, laboratory courses and field experiences. Modern, well-maintained facilities and an excellent placement record make the programs especially attractive.

The major in Communication Technologies prepares individuals for a variety of careers such as broadcast producer, public relations consultant, photographer, magazine production, sales executive, Web page developer, announcer, customer service representative, journalist, and videographer. Students majoring in Communication Technologies select one emphasis area: broadcast production, imaging media, journalism or public relations. Opportunities for student involvement include TV-5, WSUP Radio, the Exponent, Christmas Telethon for Wisconsin Badger Camp, the Public Relations Organization (PRO), Imaging Media Group and the National Broadcasting Society’s local student chapter.

General Requirements
Bachelor of Science Degree
- Total for Graduation: 120 credits
- General Education: 43-57 credits

Communication Technologies
- Comprehensive Major: 60 credits
- Major with required minor: 36 and 24 credits

Bachelor of Arts Degree
- Total for Graduation: 120 credits
- General Education: 43-57 credits (Including 9 credits upper division courses in Humanities, Fine Arts or Social Sciences)

Communication Technologies
- Comprehensive Major: 60 credits
- Major with required minor: 36 and 24 credits

Program Purpose
The Communication Technologies program serves UWP students by offering a comprehensive major (60 credits), or a major/minor combination (36/24 credits) through a unique balance among classroom instruction, laboratory activities and field experiences.

Program Goals
1. Prepare undergraduate students for professional careers in one or more program emphases (broadcast production, imaging media, journalism, public relations).
2. Provide coursework for programs in Business and Accounting, Agribusiness, Fine Arts, Education and other programs.
3. Provide elective coursework to satisfy the social science requirements in the General Education program.

Program Outcomes
As a result of graduating with a Bachelor of Arts or a Bachelor of Science degree in Communication Technologies, our students will be able to:
1. demonstrate proficiency in both written and oral communication;
2. demonstrate knowledge of the role of mass media in our society;
3. demonstrate knowledge about the concepts, terminology and issues associated with technologies used in communication;
4. demonstrate knowledge of legal concepts, terminology and issues in communication activities;
5. utilize appropriate technologies and computer software associated with at least one of four emphases in this program;
6. apply classroom knowledge in the workplace; and
7. demonstrate knowledge of ethical decision making.
MAJORS

Course work in the major includes core requirements (15 credits), and completion of an emphasis area (21 credits). Students also select 24 credits from a list of approved electives or any university minor outside the chosen emphasis area. A grade of “C” or better must be earned in all graded major core and emphasis required classes.

Major Core Requirements (15 credits):
COMMNCTN 1630 Introduction to Mass Media 3 cr
COMMNCTN 3010 Business Communication 3 cr
COMMNCTN 3150 Communication Research 3 cr
COMMNCTN 3930 Communication Law 3 cr
COMMNCTN 4990 Internship 3 cr

Broadcast Production Emphasis

Required Courses (21 credits):
COMMNCTN 1250 Audio and Video Systems 3 cr
COMMNCTN 2070 Introduction to Video Production 3 cr
COMMNCTN 2110 Applied Communication** 1 cr
COMMNCTN 2530 Audio Production 3 cr
COMMNCTN 3120 Applied Communication ** 2 cr
COMMNCTN 3240 Video Production* 3 cr
or
COMMNCTN 3290 Radio Station Procedures* 3 cr

One set of courses from:
COMMNCTN 2030 Basic Newswriting and Reporting* 3 cr
COMMNCTN 3560 Broadcast News* 3 cr
or
COMMNCTN 2050 Broadcast Media Writing* 3 cr
COMMNCTN 3840 Post-Production* 3 cr

Electives
(Select at least 24 credits for the comprehensive major or select any university minor outside the emphasis area):
COMMNCTN 1030 Software: Photoshop Basic 1 cr
COMMNCTN 1040 Software: Photoshop Intermediate 1 cr
COMMNCTN 1100 Software: Flash 1 cr
COMMNCTN 1130 Software: Dreamweaver Basic 1 cr
COMMNCTN 1230 Survey of Imaging 3 cr
COMMNCTN 1730 Introduction to Communication Technologies 3 cr
COMMNCTN 2090 Principles of Interactivity 3 cr
COMMNCTN 2360 Public Relations Principles 3 cr
COMMNCTN 3030 Multimedia Projects 3 cr
COMMNCTN 3100 Topics in Communication 1-3 cr
COMMNCTN 3580 Documentary 3 cr
COMMNCTN 3660 Broadcast Performance 3 cr
COMMNCTN 3770 Theories in Media and Culture 3 cr
COMMNCTN 3860 Media Advertising and Sales 3 cr
COMMNCTN 4030 Applied Communication** 3 cr
COMMNCTN 4040 Communication Practicum 1-3 cr
COMMNCTN 4130 Communication Technologies Management 3 cr
COMMNCTN 4140 U.S. Investigative Journalism 3 cr
COMMNCTN 4710 Independent Study 1-3 cr
BUSADMIN 2630 Introduction to Marketing 3 cr
BUSADMIN 3630 Advertising 3 cr

** These courses are repeatable, up to 8 credits applied to the major; may not be double counted between emphasis requirements and electives.

Imaging Media Emphasis

Required Courses (21 credits):
COMMNCTN XXXX Any four software courses 4 cr
COMMNCTN 1230 Survey of Imaging 3 cr
COMMNCTN 1930 Basic Photography 3 cr
COMMNCTN 3070 History of Imaging 3 cr
COMMNCTN 4050 Professional Practice 2 cr

One set of courses from:
COMMNCTN 3500 Photography II* 3 cr
COMMNCTN 4500 Photography III* 3 cr
or
COMMNCTN 2090 Principles of Interactivity* 3 cr
COMMNCTN 3030 Multimedia Projects* 3 cr

Electives
(Select at least 24 credits for the comprehensive major or select any university minor outside the emphasis area):
COMMNCTN XXXX (additional) software courses 1-3 cr
COMMNCTN 1250 Audio and Video Systems 3 cr
COMMNCTN 2070 Introduction to Field Production 3 cr
COMMNCTN 2110 Applied Communication** 1 cr
COMMNCTN 3100 Topics in Communication 1-3 cr
COMMNCTN 3120 Applied Communication** 2 cr
COMMNCTN 3330 Digital Imaging 3 cr
COMMNCTN 3580 Documentary 3 cr
COMMNCTN 3770 Theories of Media and Culture 3 cr
COMMNCTN 4030 Applied Communication** 3 cr
COMMNCTN 4040 Communication Practicum 1-3 cr
COMMNCTN 4130 Communication Technologies Management 3 cr
COMMNCTN 4710 Independent Study 1-3 cr
ART 1010 Drawing I: Basic Drawing 2 cr
ART 1420 Basic Design I: 2-D 2 cr
ART 2140 Art History I 3 cr
ART 2710 Graphic Design I 3 cr
ART 2740 Graphic Design II 3 cr
ART 3220 Printmaking 3 cr
ENGLISH 2250 Introduction to Film 3 cr
ENGLISH 3950 Writing for Performance 3 cr
COMPUTER 1130 Introduction to Programming 3 cr
COMPUTER 2430 Object-Oriented Programming I 3 cr
MUSIC 2030 Introduction to Music History 3 cr
THEATRE 1230 Stagecraft 3 cr

* If not taken as emphasis requirement, may be an elective.

** These courses are repeatable, up to 8 credits applied to the major; may not be double counted between emphasis requirements and electives.
Journalism Emphasis

Required Courses (21 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN 1010</td>
<td>Software: Quark Basic</td>
<td>1 cr</td>
</tr>
<tr>
<td>COMMNCTN 1030</td>
<td>Software: Photoshop Basic</td>
<td>1 cr</td>
</tr>
<tr>
<td>COMMNCTN 1930</td>
<td>Basic Photography</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 2030</td>
<td>Basic Newswriting and Reporting</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 2110</td>
<td>Applied Communication</td>
<td>1 cr</td>
</tr>
<tr>
<td></td>
<td>(Publications)</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 3730</td>
<td>Project Writing and Reporting</td>
<td>3 cr</td>
</tr>
<tr>
<td>or COMMNCTN 3920</td>
<td>Promotional Techniques*</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3830</td>
<td>Editing for Print</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 4140</td>
<td>U.S. Investigative Journalism</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3000+</td>
<td>Any upper division POLISCI course</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Electives (select at least 24 credits for the comprehensive major or select any university minor outside the emphasis area):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN XXXX</td>
<td>Any additional software courses</td>
<td>2 cr</td>
</tr>
<tr>
<td>COMMNCTN 2050</td>
<td>Broadcast Media Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 2090</td>
<td>Principles of Interactivity</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3100</td>
<td>Topics in Communication</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3120</td>
<td>Applied Communication</td>
<td>2 cr</td>
</tr>
<tr>
<td></td>
<td>(Publications)</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 3560</td>
<td>Broadcast News</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3580</td>
<td>Documentary</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3770</td>
<td>Theories in Media and Culture</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 4030</td>
<td>Applied Communication</td>
<td>3 cr</td>
</tr>
<tr>
<td></td>
<td>(Publications)</td>
<td></td>
</tr>
<tr>
<td>ENGLISH 3360</td>
<td>Magazine Writing and Editing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3940</td>
<td>Grammar in Context</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

** These courses are repeatable, up to 8 credits applied to the major; may not be double counted between emphasis requirements and electives.

Public Relations Emphasis

Required Courses (21 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN XXXX</td>
<td>Software Courses (any three)</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 1730</td>
<td>Introduction to Communication Technologies*</td>
<td>3 cr</td>
</tr>
<tr>
<td>or COMMNCTN 1930</td>
<td>Basic Photography*</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 2030</td>
<td>Basic Newswriting and Reporting*</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 2050</td>
<td>Broadcast Media Writing*</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 2360</td>
<td>Public Relations Principles</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3800</td>
<td>Meetings and Events*</td>
<td>3 cr</td>
</tr>
<tr>
<td>or COMMNCTN 3860</td>
<td>Media Advertising and Sales</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3730</td>
<td>Project Writing and Reporting*</td>
<td>3 cr</td>
</tr>
<tr>
<td>or COMMNCTN 3920</td>
<td>Promotional Techniques*</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 4270</td>
<td>Volunteers, Fundraising and Grants</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

* If not taken for emphasis requirement, this course may be taken as an elective.

Electives (minimum 24 credits for the comprehensive major or select any university minor outside the emphasis area):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN XXXX</td>
<td>Any COMMNCTN course*</td>
<td>1-24 cr</td>
</tr>
<tr>
<td>BUSINESS 2630</td>
<td>Introduction to Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSINESS 3630</td>
<td>Advertising</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3360</td>
<td>Magazine Writing and Editing</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOCIOLOGY 3230</td>
<td>Human Relations</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPEECH 3500</td>
<td>Persuasion and Argumentation</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPEECH 4010</td>
<td>Public Address and Speech Writing</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

** COMMNCTN courses not counted in requirements for core or this emphasis may be chosen as electives.

MINORS

Broadcasting Minor (24 credits)

Required Courses (15 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN 1250</td>
<td>Audio and Video Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 1630</td>
<td>Introduction to Mass Media*</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 1730</td>
<td>Introduction to Communication Technologies</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 2070</td>
<td>Introduction to Video</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 2530</td>
<td>Audio Production</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Electives (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN 1030</td>
<td>Software: Photoshop Basic</td>
<td>1 cr</td>
</tr>
<tr>
<td>COMMNCTN 1040</td>
<td>Software: Photoshop Intermediate</td>
<td>1 cr</td>
</tr>
<tr>
<td>COMMNCTN 1100</td>
<td>Software: Flash Basic</td>
<td>1 cr</td>
</tr>
<tr>
<td>COMMNCTN 1130</td>
<td>Software: Dreamweaver Basic</td>
<td>1 cr</td>
</tr>
<tr>
<td>COMMNCTN 2050</td>
<td>Broadcast Media Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 2090</td>
<td>Principles of Interactivity</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3030</td>
<td>Multimedia Projects</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3240</td>
<td>Video Production</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3290</td>
<td>Radio Station Procedures</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3560</td>
<td>Broadcast News</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3580</td>
<td>Documentary</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3660</td>
<td>Broadcast Performance</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3840</td>
<td>Post Production</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3860</td>
<td>Media Advertising and Sales</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3930</td>
<td>Communication Law*</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 4130</td>
<td>Communication Technologies*</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

* Communication Technologies majors may not double count core requirements with minor requirements or electives; select any other minor elective as a substitute.

Imaging Media Minor (24 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN XXXX</td>
<td>Software: Any 6 courses</td>
<td>6 cr</td>
</tr>
<tr>
<td>COMMNCTN 1230</td>
<td>Survey of Imaging</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 1630</td>
<td>Introduction to Mass Media*</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 1930</td>
<td>Basic Photography</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN 3070</td>
<td>History of Imaging</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Concentration (Select one of the following sets):
New Media Concentration:

- COMMNCTN 2090 Principles of Interactivity 3 cr
- COMMNCTN 3030 Multimedia Projects 3 cr

Photography Concentration:

- COMMNCTN 3500 Photography II 3 cr
- COMMNCTN 4500 Photography III 3 cr

* Communication Technologies majors must select a substitute course from the list of electives for the Imaging Media emphasis.

Journalism Minor (24 credits)

**Required Courses (15 credits):**

- COMMNCTN 1010 Software: Quark Basic 1 cr
- COMMNCTN 1030 Software: Photoshop Basic 1 cr
- COMMNCTN 1930 Basic Photography 3 cr
- COMMNCTN 2030 Basic Newswriting and Reporting 3 cr
- COMMNCTN 2110 Applied Communication 1 cr
  (Publications)
- COMMNCTN 3730 Project Writing and Reporting 3 cr
- COMMNCTN 3830 Editing for Print 3 cr

**Electives (Select at least 9 credits):**

- COMMNCTN 1230 Survey of Imaging 3 cr
- COMMNCTN 2050 Broadcast Media Writing 3 cr
- COMMNCTN 3150 Communication Research 3 cr
- COMMNCTN 3560 Broadcast News 3 cr
- COMMNCTN 3580 Documentary 3 cr
- COMMNCTN 3770 Theories of Media and Culture 3 cr
- COMMNCTN 3920 Promotional Techniques 3 cr
- COMMNCTN 3930 Communication Law* 3 cr
- COMMNCTN 4140 U.S. Investigative Journalism 3 cr
- ENGLISH 3360 Magazine Writing and Editing 3 cr
- ENGLISH 3940 Grammar in Context 3 cr
- POLISCI XXXX Any POLISCI upper division course 3 cr

* Communication Technologies majors may not double count core requirements with minor requirements or electives; select any other Communication Technologies courses as substitutes.

Public Relations Minor (24 credits)

**Required Courses (15 credits):**

- COMMNCTN 1630 Introduction to Mass Media* 3 cr
- COMMNCTN 1730 Introduction to Communication Technologies
  or
- COMMNCTN 1930 Basic Photography 3 cr
- COMMNCTN 2030 Basic Newswriting and Reporting 3 cr
  or
- COMMNCTN 2050 Broadcast Media Writing 3 cr
- COMMNCTN 2360 Public Relations Principles 3 cr
- COMMNCTN 3010 Business Communication* 3 cr
- COMMNCTN 3730 Project Writing and Reporting 3 cr
  or
- COMMNCTN 3920 Promotional Techniques 3 cr

**Two courses from:**

- COMMNCTN 3800 Meetings and Events 3 cr
- COMMNCTN 3860 Media, Advertising and Sales 3 cr
- COMMNCTN 4270 Volunteers, Fundraising and Grants 3 cr

* Communication Technologies majors may not double count core requirements with minor requirements; select any other Communication Technologies courses as substitutes.
**About the Department and Major**

Technology Education prepares students to teach in elementary, middle level and secondary school systems. A student completing this major receives Department of Public Instruction certification to teach Technology Education (220 license). The strength of the program is in the collaboration between professional education course requirements and technology course requirements. Technology Education majors learn “hands on” approaches to illustrate the effects of technology on modern life.

Students who complete the major in industrial technology management, with an option in manufacturing technology management can expect to enter the industry in technical, managerial and staff positions in the areas of production and manufacturing, supervision, technical sales and service and quality assurance. Courses required within this option include industrial management, technical areas, safety, business administration, English and computer science. Students are strongly encouraged to select courses that support their defined career objectives.

The option in building construction management prepares graduates to enter middle management positions in the construction industry as project managers, estimators, schedulers and in supervision.

The option in occupational safety management prepares graduates to enter manufacturing and construction industries, business, consulting agencies, insurance companies and government agencies in management positions.

A cooperative education and internship program is administered by the department. Through a supervised work experience with approved employers, students gain the advantage of up-to-date knowledge and practical experience related to their major and area of specialization. Students wishing to complete an industrial internship must meet the following requirements: (A) The following general education requirements must be completed before a student will be permitted to enroll in an industrial studies internship: ENGLISH 1130 and 1230, SPEECH 1010, and mathematics (three credits); (B) Be in good academic standing and be classified as a junior (minimum 60 credits); (C) Be approved and registered for the credits prior to the internship or cooperative education experience; (D) have completed 18 credits of industrial studies course work (INDUSTDY). Three credits in INDUSTDY 4990 Industrial Studies Internship are required; however a maximum of 8 credits may be counted towards a student’s degree.

**Mission Statements and Student Learning Outcomes for the Department and Majors/ Emphases**

The mission of the Department of Industrial Studies is to provide exceptional quality education and practical experiences for students. The instruction provided will emphasize theoretical and practical studies, internships, applied research and the relationship of management and technology, toward the preparation of competent leaders for a global society.
Industrial Technology Management Emphases

Mission Statements

1. The mission of the Building Construction Management Option is to prepare competent professional leaders who understand the interrelationships between management and construction technology and apply their skills to solve real-world problems in a global society. Building Construction Management Student Learning Outcomes are:
   a. Students will be able to estimate the cost of construction.
   b. Students will be able to plan and execute a schedule of construction.
   c. Students will be able to demonstrate proficiency in using computer graphics and management software programs.
   d. Students will be able to evaluate and plan for HVAC, electrical and plumbing using various schematic drawings.
   e. Students will be able to identify advantages and disadvantages of various construction materials for specific situations.
   f. While on the job site, students will be able to demonstrate safe operation of construction tools and equipment.
   g. Students will be able to develop and implement construction safety plans, recognize safe practices and also make corrections for unsafe conditions at the job site.
   h. Students will be able to perform various surveying techniques in plotting for construction.
   i. Students will be able to demonstrate various aspects of construction administration.

2. The mission of the Manufacturing Technology Management Option is to offer the best educational opportunities to prepare professional and technical leaders for manufacturing and service industries. These opportunities emphasize theoretical and practical experiences, internships and applied research. The program stresses the relationship of management and technology for the preparation of competent industrial leaders for a global manufacturing environment. Manufacturing Technology Management Student Learning Outcomes are:
   a. Students will be able to identify advantages and limitations of industrial materials in the manufacturing of products.
   b. Students will be able to explain the basics of industrial processes.
   c. Students will be able to develop and execute a production plan for manufacturing and a plan for the procurement of equipment.
   d. Students will be able to assess in practical terms the elements of a quality system.
   e. Students will be able to assess the cost of delivering a product or service using various work measurements and cost analysis techniques.
   f. Students will be able to demonstrate their ability to lead others within the vision, values and ethics in the global economy and deal with personnel issues having an appreciation for cultural differences.
   g. Students will be able to demonstrate their ability to utilize computer technology through graphics, programming, machining and communication.
   h. Students will have the ability to adapt and modify to current needs.
   i. Students will have the ability to problem solve and identify root causes.
   j. Students will be able to understand research procedures through interpretation of data and through conducting research.
   k. Students will be able to develop and implement manufacturing safety plans.

3. The mission of the Occupational Safety Management Option is to develop highly competent professionals and leaders in the field of safety and health through classroom preparation, laboratory activities and internships. These educational experiences emphasize safety policies, procedures, issues and incidents in the global workplace. Occupational Safety Management Student Learning Outcomes are:
   a. Students will be able to interpret government laws and policies as they pertain to safety.
   b. Students will be able to conduct safety inspections of facilities, both work facilities and school facilities.
   c. Students will be able to promote a safety culture.
   d. Students will be able to analyze work situations for ergonomic issues.
   e. Students will be able to develop emergency disaster preparedness plans.
   f. Students will be able to analyze the safe operation of equipment, machines and tools in the course of work.
   g. Students will be able to develop and deliver safety programs at the workplace.

Technology Education Mission Statement

The mission of the Technology Education program is to prepare the finest Technology Education teachers in the State of Wisconsin. Competencies follow the Wisconsin Content Guidelines for Technology Education.

The Technology Education teacher shall demonstrate knowledge and skills in:

1. Articulating a philosophy informed by current research findings in technology education, curriculum and instructional design, assessment and professional development.
2. Designing programs based on a sound mission statement with stated goals and objectives that reflect the definition and intent of technology education.
3. Explaining the development of technology and its effect on people, the environment and culture; industry and its organization, personal systems, techniques, resources and products; and the impact of technology and industry on society and culture.
4. Categorizing technological concepts, processes and systems according to various content organizers such as bio-related, construction, energy/power, information communications, manufacturing, medical, transportation and other technologies.
5. Articulating and using the concepts, skills and knowledge contained in current state and national standards for technology education in the development of technology education across the curriculum.
6. Relating technology education to other academic disciplines and fields of study including the articulation and integration of technology education across the curriculum.
The teaching and technical skills appropriate to technology education including:

a. The use of an organized set of technological concepts, processes and systems when designing course outlines, instructional strategies and evaluating student work.
b. The development of a strategic program that includes a mission statement, rationale for change, goals, objectives, action steps and program evaluation.
c. The selection of course and/or program content based on the goals and objectives appropriate to the various technology content organizations.
d. The development of lesson plans, the organization of material and the selection of appropriate instructional strategies to effectively teach the psychomotor, affective and cognitive domains of learning.
e. Applying problem-solving and creative abilities involving human and material resources, processes and technological systems.

The application of their knowledge, understanding and philosophy of technology education to create and manage a positive, effective learning environment, including:

a. The identification and incorporation of safe, effective and appropriate use of contemporary technological tools, instruments and machines into a program of study.
b. The incorporation of insights, knowledge and applications of technological concepts, processes and systems into their instruction.
c. The incorporation of skills, creative abilities, positive concepts and individual potentials into their instruction.
d. The use of activity oriented laboratory instruction that reinforces abstract concepts through concrete experiences.
e. The application of technology to the design and production of activities for student use.
f. The development of technology education programs that advance student attitudes, knowledge and skills related to the functions of technological systems.
g. The development of student abilities to apply technological knowledge and skills, and assess new or different past-present-future technology systems.
h. The selection of appropriate instructional strategies to effectively teach all student populations.
i. The effective management of a technology education laboratory for safety, inventory, filing, requisitioning equipment and materials, maintenance and budgeting.
j. The development and implementation of a behavior management program which defines clear expectations for student conduct.
k. Establishing technology related career and technical student organizations such as SkillsUSA or Technology Student Association as an integral part of the technology education curriculum.
l. The management of technological activities in both individual and group settings.
m. The application of multicultural, gender and global perspectives, as well as values and ethics of content issues as they relate to the study of technology.
n. The promotion and articulation of technology education to internal and external audiences.
o. Relating the study and mastery of technology to lifelong learning and preparation for careers and future education and training.
p. The implementation and management of a work-based learning program including the supervision of students.

Continuous improvement, instruction, activities and self, through:

a. The development and coordination of an external advisory committee for technology education and student organizations.
b. The identification and use of standards for the evaluation and revision of technology education programs.
c. The participation in related professional organizations for technology education teachers.

General Requirements
Bachelor of Science Degree
Total for Graduation.................................................120 credits
General Education.................................................. 44-58 credits
Major Studies ......................................................... 48-54 credits

Technology Education Major

Course work in the major includes general university requirements, professional education requirements and technology education requirements. An option is available for students interested in qualifying for dual certification in both agricultural education and technology education; please see your advisor for details.

Core Courses
Professional Education Requirements (42-52 credits) - GPA 2.75 or better

Core Courses plus select Option A, Option B or Option C:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHING 1230</td>
<td>Introduction to Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 2130</td>
<td>Human Growth and Development</td>
<td>3 cr</td>
</tr>
<tr>
<td>TEACHING 3320</td>
<td>Psychology of Learning</td>
<td>3 cr</td>
</tr>
<tr>
<td>TEACHING 3630</td>
<td>Ethnic and Gender Equity in Education</td>
<td>3 cr</td>
</tr>
<tr>
<td>TEACHING 4660</td>
<td>Student Teaching</td>
<td>12 cr</td>
</tr>
<tr>
<td>TEACHING 4760</td>
<td>Internship in Teaching</td>
<td>12 cr</td>
</tr>
<tr>
<td>TEACHING 4990</td>
<td>Licensure Portfolio</td>
<td>3 cr</td>
</tr>
<tr>
<td>AGINDUS 3900</td>
<td>Planning Cooperative Education in Agriculture</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3930</td>
<td>Teaching Technology Education</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4640</td>
<td>Curriculum and Facility Planning</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4820</td>
<td>Principles of Vocational Technology Education</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

Option A (8 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHING 4020</td>
<td>Educational Media Technology</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 4210</td>
<td>Pre-Student Teaching</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 3110</td>
<td>Key Concepts of Middle Level Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 3120</td>
<td>Characteristics of Transcenscents</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

Option B (12 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHING 4020</td>
<td>Educational Media Technology</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 4210</td>
<td>Pre-Student Teaching</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 3110</td>
<td>Key Concepts of Middle Level Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 3120</td>
<td>Characteristics of Transcenscents</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 4220</td>
<td>Advising Interaction and Communication</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 4620</td>
<td>Teaching Transcenscents</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

Option C (18 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHING 4050</td>
<td>Middle Level Professional Preparation Seminar</td>
<td>18 cr</td>
</tr>
</tbody>
</table>
Technology Education Major
(36 credits) - GPA 2.75 or better

Required (27 credits):
- COMMNCTN 1230 Survey of Imaging 3 cr
- COMMNCTN 1250 Audio and Video Systems 3 cr
- COMMNCTN 1930 Basic Photography 3 cr
- INDUSTDY 1030 Introduction to Manufacturing 3 cr
- INDUSTDY 1130 Wood Technology 3 cr
- INDUSTDY 1200 AC/DC Fundamentals 3 cr
- INDUSTDY 1230 Technical Drafting 3 cr
- INDUSTDY 1260 Building Construction Drafting 3 cr
- INDUSTDY 1430 Introduction to Metals Processes 3 cr
- INDUSTDY 1530 Power Systems Technology 3 cr
- INDUSTDY 1830 Synthetic and Composite Materials 3 cr
- INDUSTDY 2430 Construction Materials and Graphics 3 cr

Electives (9 credits)
Select any three INDUSTDY courses

Other requirements:
- PPST/CBT
  - Writing (174/320)
  - Math (173/318)
- Admission to School of Education (Requires Admission Portfolio)
- Admission to Student Teaching (Requires Student Teaching Portfolio and Praxis Competency Exam)
- Credit Check
- Licensure Portfolio
- Overall GPA 2.75 is needed to complete program
- Check:
  1. Minimum 120 credit
  2. 39 credits in 3000 or 4000 level courses
  3. Cumulative grade point average of at least 2.75
  4. Grade point average of at least 2.75 within the major
  5. 32 credits in residence at UW-Platteville; also 23 of the last 32 credits must be in residence.

Agricultural/Industrial Technology Education

Teaching (B-21 Dual Certification)
Students wishing to receive certification to teach in both Agricultural Education AND Technology Education may pursue a dual certification by taking course work in both areas. Dual certification requires student teaching in both areas and taking/passing the Praxis II competency exam in both areas as well. The list of courses may be found under Agricultural Education.

Industrial Technology Management Major

Course work in the major includes core courses and a choice of three options: building construction management, manufacturing technology management or occupational safety management.

Required Courses (9 credits):
- INDUSTDY 2710 Principles of Safety 3 cr
- INDUSTDY 4980 Training and Supervision 3 cr
- INDUSTDY 4990 Industrial Studies Internship 3 cr

Math and Social Science Requirements Specific to the Major (may also be used to fulfill general education requirements):
- MATH 1830 Elementary Statistics 3 cr
- PHYSICS 1050 Principles of Physics 5 cr
- CHEMISTRY 1050 General Chemistry 5 cr

(Not: students choosing the Building Construction Management Option may select GEOGRAPHY 1040 Survey of Physical Geography or GEOLOGY 1140 Physical Geology in lieu of either Physics or Chemistry)

Building Construction Management Option (51 credits)

www.uwplatt.edu/ind_studies/bcm.html

Required Professional Concentration Courses (22 credits):
- INDUSTDY 1260 Building Construction Drafting 3 cr
- COMPUTER 1830 Microcomputer Applications 3 cr
- ACCTING 2010 Financial Accounting 3 cr
- INDUSTDY 3140 General Construction Estimating 4 cr
- INDUSTDY 3180 Construction Safety Management 3 cr
- INDUSTDY 3220 Construction Procedures 3 cr
- INDUSTDY 4840 Construction Administration 3 cr

Required Technical Concentration Courses (21 credits):
- INDUSTDY 1130 Wood Technology 3 cr
- INDUSTDY 2430 Construction Materials and Graphics 3 cr
- INDUSTDY 2540 Materials and Techniques of Building Construction 3 cr
- INDUSTDY 3210 Construction Laboratory 3 cr
- INDUSTDY 4530 Residential Planning and Design 3 cr
- INDUSTDY 4630 Building Systems Analysis 3 cr
- INDUSTDY 4960 Commercial Building Planning and Construction 3 cr

Electives (8 credits):
- CIVILENG 2630 Elements of Surveying 3 cr
- CIVILENG 4030 Construction Equipment 2 cr
- BUSADMIN 2330 Leadership and Management 3 cr
- BUSADMIN 3030 Human Resource Management 3 cr
- BUSADMIN 3130 Legal Environment of Business 3 cr
- BUSADMIN 3430 Risk Management 3 cr
- INDUSTDY 4020 Topics in Industrial Studies 1-3 cr
- INDUSTDY 4990 Industrial Studies Internship 1-5 cr
Manufacturing Technology Management Option (60 credits)

www.uwplatt.edu/ind_studies/itm.html

This option consists of 60-66 credits comprised of course work in the professional concentration, technical core and a 24-30 credit technical minor.

Required Professional Concentration Courses (15 credits):

- INDUSTDY 1030 Introduction to Manufacturing 3 cr
- BUSADMIN 2330 Leadership and Management 3 cr
- INDUSTDY 4900 Work Measurement and Human Factors 3 cr
- INDUSTDY 4940 Quality Assurance 3 cr
- INDUSTDY 4950 Production Planning and Control 3 cr

Required Technical Core Courses (21 credits):

- INDUSTDY 1200 AC/DC Fundamentals 3 cr
- INDUSTDY 1230 Technical Drafting 3 cr
- COMPUTER 1130 Introduction to Programming 3 cr
  or
- COMPUTER 1830 Microcomputer Applications 3 cr
- INDUSTDY 1430 Introduction to Metals Processes 3 cr
- INDUSTDY 1530 Power Systems Technology 3 cr
- INDUSTDY 1830 Synthetic and Composite Materials 3 cr

Electives:

- INDUSTDY 4990 Industrial Studies Internship 1-5 cr

Select individual courses and/or a university minor in consultation with advisor to complete the degree.

Technical Electives (15 credits):

- BUSADMIN 3430 Risk Management 3 cr
- CRIMLJUS 2930 Interviewing 3 cr
- INDUSTDY 3180 Construction Safety Management 3 cr
- INDUSTDY 3810 Alcohol/Drugs Related to Safety 3 cr
- INDUSTDY 4020 Topics in Industrial Studies 1-3 cr
- INDUSTDY 4480 Industrial Robotics 3 cr
- INDUSTDY 4750 Disaster Preparedness 3 cr
- INDUSTDY 4810 Fire Protection 3 cr
- INDUSTDY 4950 Production Planning and Control 3 cr
- INDUSTDY 4990 Industrial Studies Internship 1-5 cr

Select individual courses and/or a university minor in consultation with advisor to complete the degree.

TECHNICAL MINORS

Building Construction Management Minor (24 credits)

Required Courses (if not completed as part of the major) (6 credits):

- INDUSTDY 1260 Building Construction Drafting 3 cr
- INDUSTDY 2710 Principles of Safety 3 cr

Required Courses (10 credits):

- INDUSTDY 2430 Construction Materials and Graphics 3 cr
- INDUSTDY 3140 General Construction Estimating 4 cr
- INDUSTDY 3220 Construction Procedures 3 cr

Electives (8 credits):

- INDUSTDY 4020 Topics in Industrial Studies 1-3 cr
- INDUSTDY 4530 Residential Planning and Design 3 cr
- INDUSTDY 4630 Building Systems Analysis 3 cr
- INDUSTDY 4840 Construction Administration 3 cr
- INDUSTDY 4960 Commercial Building Planning and Construction Techniques 3 cr

Computer Integrated Manufacturing Minor (27 credits)

Required Courses (if not completed as part of the major) (9 credits):

- INDUSTDY 1030 Introduction to Manufacturing 3 cr
- INDUSTDY 1430 Introduction to Metals Processes 3 cr
- INDUSTDY 1530 Power Systems Technology 3 cr

Required Courses (9 credits):

- INDUSTDY 3510 Machining and CNC Programming 3 cr
- INDUSTDY 3460 3D Industrial Production Drafting 3 cr
- INDUSTDY 3560 Industrial Control Systems 3 cr

Electives (at least 9 credits):

- INDUSTDY 4020 Topics in Industrial Studies 1-3 cr
- INDUSTDY 4130 Industrial Laser Application 3 cr
- INDUSTDY 4160 Metal Manufacturing Senior Design 3 cr
- INDUSTDY 4480 Industrial Robotics 3 cr

Occupational Safety Management Option (51 credits)

www.uwplatt.edu/ind_studies/safe.html

Required Professional Concentration Courses (15 credits):

- INDUSTDY 1030 Introduction to Manufacturing 3 cr
- COMPUTER 1830 Microcomputer Applications 3 cr
- ENGLISH 3000 Technical Writing 3 cr
  or
- COMMNCNT 3010 Business Communication 3 cr
- BUSADMIN 3030 Human Resource Management 3 cr
  or
- BUSADMIN 3820 Professional Selling 3 cr
- CRIMLJUS 2630 Private Security Operations 3 cr

Required Safety Concentration Courses (18 credits):

- INDUSTDY 3590 Industrial Hygiene Technology 3 cr
- INDUSTDY 3610 Safety Worker Compensation Laws 3 cr
- INDUSTDY 4720 Seminar in Safety 3 cr
- INDUSTDY 4770 Loss Control Safety Management 3 cr
- INDUSTDY 4780 Ergonomics in the Workplace 3 cr
- INDUSTDY 4790 Safety Management Components 3 cr

Technology Lab Classes (3 credits):

- INDUSTDY 1200 AC/DC Fundamentals 3 cr
- INDUSTDY 1230 Technical Drafting 3 cr
- INDUSTDY 1430 Introduction to Metals Processes 3 cr
- INDUSTDY 1530 Power Systems Technology 3 cr
- INDUSTDY 1830 Synthetic and Composite Materials 3 cr

Electives (at least 9 credits):

- INDUSTDY 4020 Topics in Industrial Studies 1-3 cr
- INDUSTDY 4130 Industrial Laser Application 3 cr
- INDUSTDY 4160 Metal Manufacturing Senior Design 3 cr
- INDUSTDY 4480 Industrial Robotics 3 cr

Building Construction Management Minor (24 credits)

Required Courses (if not completed as part of the major) (6 credits):

- INDUSTDY 1260 Building Construction Drafting 3 cr
- INDUSTDY 2710 Principles of Safety 3 cr

Required Courses (10 credits):

- INDUSTDY 2430 Construction Materials and Graphics 3 cr
- INDUSTDY 3140 General Construction Estimating 4 cr
- INDUSTDY 3220 Construction Procedures 3 cr

Electives (8 credits):

- INDUSTDY 4020 Topics in Industrial Studies 1-3 cr
- INDUSTDY 4530 Residential Planning and Design 3 cr
- INDUSTDY 4630 Building Systems Analysis 3 cr
- INDUSTDY 4840 Construction Administration 3 cr
- INDUSTDY 4960 Commercial Building Planning and Construction Techniques 3 cr

Computer Integrated Manufacturing Minor (27 credits)

Required Courses (if not completed as part of the major) (9 credits):

- INDUSTDY 1030 Introduction to Manufacturing 3 cr
- INDUSTDY 1430 Introduction to Metals Processes 3 cr
- INDUSTDY 1530 Power Systems Technology 3 cr

Required Courses (9 credits):

- INDUSTDY 3510 Machining and CNC Programming 3 cr
- INDUSTDY 3460 3D Industrial Production Drafting 3 cr
- INDUSTDY 3560 Industrial Control Systems 3 cr

Electives (at least 9 credits):

- INDUSTDY 4020 Topics in Industrial Studies 1-3 cr
- INDUSTDY 4130 Industrial Laser Application 3 cr
- INDUSTDY 4160 Metal Manufacturing Senior Design 3 cr
- INDUSTDY 4480 Industrial Robotics 3 cr

Occupational Safety Management Option (51 credits)

www.uwplatt.edu/ind_studies/safe.html

Required Professional Concentration Courses (15 credits):

- INDUSTDY 1030 Introduction to Manufacturing 3 cr
- COMPUTER 1830 Microcomputer Applications 3 cr
- ENGLISH 3000 Technical Writing 3 cr
  or
- COMMNCNT 3010 Business Communication 3 cr
- BUSADMIN 3030 Human Resource Management 3 cr
  or
- BUSADMIN 3820 Professional Selling 3 cr
- CRIMLJUS 2630 Private Security Operations 3 cr

Required Safety Concentration Courses (18 credits):

- INDUSTDY 3590 Industrial Hygiene Technology 3 cr
- INDUSTDY 3610 Safety Worker Compensation Laws 3 cr
- INDUSTDY 4720 Seminar in Safety 3 cr
- INDUSTDY 4770 Loss Control Safety Management 3 cr
- INDUSTDY 4780 Ergonomics in the Workplace 3 cr
- INDUSTDY 4790 Safety Management Components 3 cr

Technology Lab Classes (3 credits):

- INDUSTDY 1200 AC/DC Fundamentals 3 cr
- INDUSTDY 1230 Technical Drafting 3 cr
- INDUSTDY 1430 Introduction to Metals Processes 3 cr
- INDUSTDY 1530 Power Systems Technology 3 cr
- INDUSTDY 1830 Synthetic and Composite Materials 3 cr

Electives (at least 9 credits):

- INDUSTDY 4020 Topics in Industrial Studies 1-3 cr
- INDUSTDY 4130 Industrial Laser Application 3 cr
- INDUSTDY 4160 Metal Manufacturing Senior Design 3 cr
- INDUSTDY 4480 Industrial Robotics 3 cr
### Drafting and Product Development Technology (30 credits)

**Required Courses (if not completed as part of the major)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 1030</td>
<td>Introduction to Manufacturing</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 1230</td>
<td>Technical Drafting</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td>INDUSTDY 1260</td>
<td>Building Construction Drafting</td>
</tr>
<tr>
<td>INDUSTDY 1430</td>
<td>Introduction to Metals Processes</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 1830</td>
<td>Synthetic and Composite Materials</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Required Courses (9 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 3460</td>
<td>3D Industrial Production Drafting</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3950</td>
<td>Industrial Design for Production</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4360</td>
<td>Specialized Drafting Practices</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Electives (9 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 2910</td>
<td>Plastics Technology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 3130</td>
<td>The Legal Environment of Business</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3160</td>
<td>Machining and CNC Programming</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3940</td>
<td>Materials Testing and Evaluation</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4020</td>
<td>Topics in Industrial Studies</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4780</td>
<td>Ergonomics in the Workplace</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4850</td>
<td>Thermoforming Technology</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4860</td>
<td>Injection Molding Technology</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4870</td>
<td>Extrusion Technology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Industrial Control Systems Technology Minor (24 credits)

**Required Courses (if not completed as part of the major)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 1200</td>
<td>AC/DC Fundamentals</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 1530</td>
<td>Power Systems Technology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Required Courses (12 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 2260</td>
<td>Semiconductors</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3230</td>
<td>Digital Electronics</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3550</td>
<td>Fluid Power and Servo Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3560</td>
<td>Industrial Control Systems</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Electives (at least 6 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPUTER 1430</td>
<td>Programming in C++</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3160</td>
<td>Machining and CNC Programming</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4020</td>
<td>Topics in Industrial Studies</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4030</td>
<td>Electrical Power</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4130</td>
<td>Industrial Laser Applications</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4480</td>
<td>Industrial Robotics</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Metals Processing Technology Minor (27 credits)

**Required Courses (if not completed as part of the major)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 1030</td>
<td>Introduction to Manufacturing</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 1430</td>
<td>Introduction to Metals Processes</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 1830</td>
<td>Synthetic and Composite Materials</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Required Courses (9 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 3150</td>
<td>Polymeric and Ceramic Materials</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3310</td>
<td>Metallurgy and Joining Processes</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3460</td>
<td>3D Industrial Production Drafting</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Electives (9 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 3160</td>
<td>Machining and CNC Programming</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3480</td>
<td>Metalcasting Technology I</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3940</td>
<td>Materials Testing and Evaluation</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4020</td>
<td>Topics in Industrial Studies</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4130</td>
<td>Industrial Laser Application</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4160</td>
<td>Metal Manufacturing Senior Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4490</td>
<td>Metalcasting Technology II</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Occupational Safety Minor (24 credits)

**Required Courses (12 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 2710</td>
<td>Principles of Safety</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3610</td>
<td>Safety and Worker Compensation Laws</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4720</td>
<td>Seminar in Safety</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4770</td>
<td>Loss Control Safety Management</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Electives (12 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 3180</td>
<td>Construction Safety Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3590</td>
<td>Industrial Hygiene Technology</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3810</td>
<td>Alcohol and Other Drugs as Related to Safety</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4750</td>
<td>Disaster Preparedness</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4780</td>
<td>Ergonomics in the Workplace</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4790</td>
<td>Safety Management Components</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4810</td>
<td>Fire Protection</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Plastics Processing Technology Minor (24 credits)

**Required Courses (if not completed as part of the major)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 1430</td>
<td>Introduction to Metals Processes</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 1830</td>
<td>Synthetic and Ceramic Materials</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Required Courses (6 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 2910</td>
<td>Plastics Technology</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 3150</td>
<td>Polymeric and Ceramic Materials</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Electives (12 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 3940</td>
<td>Materials Testing and Evaluation</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4020</td>
<td>Topics in Industrial Studies</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4130</td>
<td>Industrial Laser Application</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4850</td>
<td>Thermoforming Technology</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4860</td>
<td>Injection Molding Technology</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDUSTDY 4870</td>
<td>Extrusion Technology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
Production and Manufacturing Management Minor (27 credits)

This minor is not available to a student having an option in Manufacturing Technology Management.

**Required Courses (18 credits):**
- INDUSTDY 1030 Introduction to Manufacturing 3 cr
- INDUSTDY 2710 Principles of Safety 3 cr
- INDUSTDY 4900 Work Measurement and Human Factors 3 cr
- INDUSTDY 4940 Quality Assurance 3 cr
- INDUSTDY 4950 Production Planning and Control 3 cr
- or
- BUSADMIN 4120 Operations Management 3 cr
- INDUSTDY 4980 Training and Supervision 3 cr

**Electives (9 credits):**
- INDUSTDY 1200 AC/DC Fundamentals 3 cr
- INDUSTDY 1230 Technical Drafting 3 cr
- INDUSTDY 1430 Introduction to Metals Processes 3 cr
- INDUSTDY 1530 Power Systems Technology 3 cr
- INDUSTDY 1830 Synthetic and Composite Materials 3 cr
International Exchange Program

The College of EMS has International Exchange Programs with France, Germany, Ireland, Turkey, Norway, Sweden, Australia and the Netherlands. Programs are based on a one-to-one exchange with host universities, and automatically fulfill the international graduate requirement. Participation in this program will not delay a student’s graduation date. The program is designed to provide students with the opportunity to gain technical and international experience while paying UWP tuition and fees. Grades and credits earned at a partner institution will be included in the calculation of the UWP grade point average. This is a valuable learning experience to broaden a student’s awareness of other cultures and diverse situations.

For more information please e-mail us at intlxchng@uwplatt.edu

Collaborative Engineering Programs

In collaboration with the UW Colleges, place-bound students can complete UW-Platteville engineering degrees at outlying locations. Programs are available at UW-Fox Valley and UW-Rock County campuses for students to complete Electrical or Mechanical Engineering with on-site UW-Platteville faculty. Students at other UW Colleges campuses can also complete degrees in engineering majors by using streaming video course delivery.

Collaborative degree students typically complete general education and pre-engineering math and science course requirements by earning an associate of Arts and Science degree through the UW Colleges. When eligible, students apply for admission to UWP to complete the major at either of the outlying locations or through streaming video. All program requirements must be met in accordance to UWP policy.

Articulation Agreements

Articulation agreements provide opportunities for students to complete their first two years of study at one university before transferring to a cooperative university to complete the course work necessary for their engineering degree. UW-Platteville has articulation agreements with several other UW institutions, including UWC-Baraboo/Sauk County, UWC-Fox Valley, UWC-Richland, UW-Parkside, UW-Stout, UW-Oshkosh, UW-Whitewater and Viterbo University. The agreement with UW-Stout also provides for students to move with ease to UW-Stout after two years at UW-Platteville.

Cooperative Education and Internships

The college offers many cooperative education and internship programs for qualified students. Co-ops, which combine classroom learning with on-the-job experience, allow students to relate theory to practice. A time frame for a co-op is considered one semester plus a summer session. The work period is spent in full-time employment with private industry or a governmental agency. The college considers internships to be summer positions related to the students’ major field of study. The engineering co-op and internship program is administered by the associate dean of the college.
Information Technology

The college has a number of computer laboratories located primarily in Ottensman Hall. Most computer labs are accessible during the open building hours. In addition to the program computer labs, whose computers carry discipline specific hardware, the college maintains the Engineering Instructional Center (EIC) as a combined teaching and open lab facility with software applicable to a variety of disciplines. The college maintains several site licenses which allow students to access software packages in their residence halls.

The requirements of the engineering majors meet or exceed the general education requirements in many areas, particularly mathematics and natural sciences. Therefore, the number of credits necessary to meet the university's general education requirements is not listed with each program. Students should check with their advisor or their department chair to determine the additional courses necessary for graduation beyond those required by their major.

Curricular patterns and courses do change. The college and the university reserve the right to change both the college and the general university requirements at any time in order to better serve the long-range interests of students.

EMS Admissions and Academic Standards Policies and Procedures

The EMS Admissions and Academic Standards Committee is responsible for the admission and academic policies of the College of EMS. The committee serves as the appeal body for all academic decisions within the college.

Students may declare a major in chemistry, computer science or mathematics upon admission to the university. Students seeking admission to the engineering programs, either as new freshmen or as transfer students, must demonstrate that they have achieved a score of 22 or higher on the mathematics portion of the ACT or have earned a grade of “C” or better in MATH 2640 Calculus and Analytical Geometry I or its equivalent. Placement into mathematics courses is based on a student’s performance on the UW System Mathematics Placement Test.

Transfer of credits toward major requirements must be approved by the department chair of the program in which the student plans to major. Each program has specific courses that must be taken in residence.

Students seeking admission to the engineering programs are initially admitted to the Department of General Engineering. They are admitted to an engineering degree program after successfully completing a set of fundamental core courses and meeting specific program requirements. Additional details are provided in the General Engineering Program description.

Students enrolled in degree programs within the College of EMS are governed by the academic standards of the university and the academic standards of their degree program. In some cases, the academic standards and requirements of a degree program are more rigorous than those of the university. For example, each degree program may stipulate grade requirements in specific major courses. In some programs, the requirement might be a “C” in some courses and a 2.00 grade point average over a number of specific courses. Students may obtain detailed descriptions of a program’s academic standards and requirements from the specific program department office.

Some programs limit the number of attempts a student has to obtain a passing grade. For example, all engineering and chemistry courses may be repeated only once. Students who fail to meet the grade requirement for a course after the second attempt are dismissed from the College of EMS.

Students dismissed from the university are automatically dismissed from their degree program in the College of EMS.

Any student dismissed from the College of EMS may petition the EMS Admissions and Academic Standards Committee for readmission to the College of EMS. Students dismissed from the university who apply for readmission must submit a separate petition to the EMS Admissions and Academic Standards Committee for readmission to the College of EMS. Students who have been dismissed from the College of EMS may be dropped from an EMS course they are registered for at any time in the semester. The EMS Appeals and Academic Standards Committee will administer this policy.

The EMS Admissions and Academic Standards Committee reviews charges of academic misconduct within the college and makes appropriate recommendations consistent with the facts established in the review process. Under circumstances of proven academic misconduct, the committee may impose penalties that include reprimand, probation and dismissal from degree programs within the college.
The Women in Engineering Program

**Director:** Tammy J. Salmon-Stephens  
**E-mail:** salmont@uwplatt.edu

The mission of the Women in Engineering Program is to inform students, parents and educators about the value of gender diversity as it relates to the Science, Mathematics, Engineering and Technology (SMET) workplace. The program promotes a supportive community through activities such as advising, mentoring and networking. **The Women in Engineering Program supports this mission for both continuing and prospective students through:**

- Women in Engineering Career Days
- The Women in Engineering Mentor Program and Center
- Women in EMS scholarship program
- Outreach visits to local schools
- A local Chapter of the Society of Women Engineers (SWE)
- One-on-one advising
- Women in Engineering, Mathematics and Science (EMS) Advisory Board
- “Engineering A Girl” Tools Workshops
- The Women in EMS Student Ambassadors

The goals of the Women in Engineering Program are:

- Increase the number of women students in the College of EMS.
- Continue to develop and implement retention strategies for women in EMS.
- Develop and implement effective strategies for program assessment.
- Continue to obtain program funding to support program initiatives.
- Become nationally recognized as a leader in gender diversity programs in SMET.

The Engineering Advising Office

**Director:** Tammy J. Salmon-Stephens  
**E-mail:** salmont@uwplatt.edu

The Engineering Advising Office provides a comprehensive set of services that assists engineering students in maximizing their educational experience at UW-Platteville while working through a challenging curriculum. The advising office does this by providing faculty and students with the most recent changes in program requirements, assisting students with scheduling questions when their assigned advisor is not available and encouraging students to utilize the numerous services on campus which have been established to assist students through their academic career. In addition, the advising office is committed to providing assistance and support to those students in transition to other career choices.
About the Department and Majors

The Department of Chemistry and Engineering Physics offers two distinct majors in Chemistry and Engineering Physics in addition to minors in Chemistry and Physics. Each of these programs are described separately below.

Five chemistry programs are offered to meet the varied needs of our students. They include: the standard chemistry major (Standard Major); the American Chemical Society (ACS) approved major (American Chemical Society (ACS) Approved Major); the biochemistry emphasis (Biochemistry Emphasis); the criminalistics emphasis (Criminalistics Emphasis ACS-track; DNA-track); and the chemistry minor.

Chemistry

Contact: Charles R. Cornett
Office: 312 Ottensman Hall
Phone: 608.342.1651
E-mail: cornettc@uwplatt.edu

Professors:
Jesse G. Reinstein
James P. Hamilton

Associate Professors:
Steven A. Steiner
Charles R. Cornett
Tim Zauche
Qiong (June) Li

Assistant Professors:
Chanaka Mendis
Michael Ruane

Lecturers:
Sofia Carlos-Cuellar
Richard Carman

Chemistry Laboratory Manager:
Kari Frederick

Academic Department Associate:
Kelly F. Steiger

MAJORS
Standard American Chemical Society (ACS) Approved
Biochemistry Emphasis
Criminalistics Emphasis

Chemistry Minor

General Requirements
Bachelor of Science Degree

Total for Graduation..................................................... 120 credits
General Education....................................................... 31 credits

Every student majoring in chemistry must meet the writing certification requirement as established by the department. Details may be obtained from the department chairperson. All chemistry majors are required to have an industrial/research experience in their junior or senior year. This requirement can be satisfied either by CHEMSTRY 4000 Undergraduate Research or CHEMSTRY 4660 Cooperative Field Experience. Students in the Criminalistics Emphasis may satisfy this requirement through CRIMLJUS 4880 Internship.
Statement of Purpose

In order to realize the mission of the university and the vision of the college, the Chemistry Program has the mission of providing students with information, theories and applications relating to the properties and interactions of matter, the methods used to obtain such insight and the abilities to critically analyze and synthesize such information. Foremost, the Chemistry Program has a commitment to the preparation of majors in the field of their choice with a strong background in the chemical sciences.

As such, the Chemistry Program will maintain an intellectual environment and educational experiences which will:
1. provide students majoring in chemistry with high quality preparation for successful professional practice in chemistry or admission to graduate or other professional schools
2. provide students majoring in other areas which specifically require chemistry as part of their curriculum with a broad-based knowledge of chemistry which meets the needs of their major; and
3. provide students taking chemistry as part of their liberal studies with a broad-based knowledge of chemistry as well as insight into the nature of the natural sciences.

Expected Student Outcomes

1. A chemistry graduate will be scientifically literate and possess a broad-based knowledge of chemical principles and techniques.
2. A chemistry graduate will be able to solve problems through creative and analytical thinking.
3. A chemistry graduate will be an effective communicator.
4. A chemistry graduate will be intellectually curious and value lifelong learning.
5. A chemistry graduate will value ethical character.
6. A chemistry graduate will be able to work independently as well as cooperatively.
7. Non-majors will apply their knowledge of chemistry content with laboratory practices to their major.
8. Liberal arts students will discover what patterns, principles and dynamics find expression in empirical data science; assess the character, possibilities and limitations of the scientific method; and engage actively in analysis of directly encountered natural phenomena.

Chemistry Major (38 credits)

The Chemistry Major is designed to equip the graduates with the necessary skills, knowledge and attitudes so they can secure meaningful employment in industrial or governmental laboratories, enter graduate and professional schools or teach at the secondary school level.

Required Chemistry Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMISTRY</td>
<td>1140 General Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>1240 General Chemistry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>2150 Quantitative Analysis</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>2730 Inorganic Chemistry *</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>3540 Organic Chemistry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>3510 Organic Chemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>3630 Organic Chemistry II</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>3610 Organic Chemistry II Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4130 Physical Chemistry I</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4110 Physical Chemistry II Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4240 Instrumental Analysis</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4630 Biochemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4060 Seminar</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4000, 4660 or CRIMLJUS 4880</td>
<td>1-8 cr</td>
</tr>
</tbody>
</table>

* not required for the criminalistics emphasis-DNA track

Required Chemistry Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH</td>
<td>2640 Calculus and Analytic Geometry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>2530 General Physics</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>2510 General Physics Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>2640 General Physics II</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>2610 General Physics II Lab</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

Students are encouraged to take the following additional mathematics and substitute physics courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH</td>
<td>2840 Calculus and Analytic Geometry III</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>2530 General Physics</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>2510 General Physics Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>2640 General Physics II</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>2610 General Physics II Lab</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

Chemistry Major, ACS Approved (46 credits)

The ACS Major is recognized by the American Chemical Society and is designed to give the graduate a stronger focus on chemistry. ACS Majors are required to take MATH 2840 Calculus and Analytic Geometry III. The curriculum includes all courses required for a chemistry major plus:

Required Chemistry Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMISTRY</td>
<td>3810 Chemical Synthesis</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4210 Physical Chemistry II Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4230 Physical Chemistry II</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4000 Undergraduate Research</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4730 Advanced Inorganic Chemistry</td>
<td>2 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4810 Advanced Topics in Organic Chemistry</td>
<td>2 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4820 Advanced Topics in Physical Chemistry</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

Plus one additional two-credit course selected from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMISTRY</td>
<td>4000 Undergraduate Research</td>
<td>2 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4730 Advanced Inorganic Chemistry</td>
<td>2 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4810 Advanced Topics in Organic Chemistry</td>
<td>2 cr</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>4820 Advanced Topics in Physical Chemistry</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

Study of a foreign language is recommended for students who plan to pursue graduate studies. In addition, substitution of PHYSICS 2530, 2510, 2640 and 2610 for the minimum physics courses is strongly encouraged for ACS-approved chemistry majors.

Chemistry Major, Biochemistry Emphasis (53-55 credits)

The Biochemistry Emphasis is designed to provide the appropriate chemistry and biology background for the graduate who plans to enter fields such as health, agriculture or safety. The Biochemistry Emphasis includes all courses required for the Chemistry major as well:
### Chemistry Major, Criminalistics Emphasis, ACS-Track (63 credits) or DNA-Track (66 credits)

This program gives a chemistry major sufficient background in criminal justice to qualify for criminalistic laboratory work. The curriculum includes all courses required for a chemistry major, plus:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 3130</td>
<td>Criminal Investigation</td>
<td>3 cr</td>
</tr>
<tr>
<td>CRIMLJUS 3140</td>
<td>Criminalistics</td>
<td>3 cr</td>
</tr>
<tr>
<td>CRIMLJUS ####</td>
<td>Criminal Justice Electives</td>
<td>3 cr</td>
</tr>
<tr>
<td>CRIMLJUS 4880</td>
<td>Internship</td>
<td>8 cr</td>
</tr>
</tbody>
</table>

CRIMLJUS 3730 Women and the Law, CRIMLJUS 4030 Criminal Law and CRIMLJUS 4330 Criminal Procedure and Evidence are highly recommended electives. Criminalistics emphasis majors are required to take the following general education courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 1130</td>
<td>Introduction to Criminal Justice</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 1650</td>
<td>Unity of Life</td>
<td>5 cr</td>
</tr>
<tr>
<td>MATH 1830</td>
<td>Elementary Statistics</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Students electing the Criminalistics Emphasis ACS-track are required to complete all requirements for the ACS-approved Chemistry Major. Students electing the Criminalistics Emphasis DNA-track are required to complete the core Chemistry major, Criminalistics Emphasis courses listed above and:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMISTRY 4830</td>
<td>Biochemistry Topics</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMISTRY 4610</td>
<td>Biochemistry Laboratory</td>
<td>1 cr</td>
</tr>
<tr>
<td>BIOLOGY 2040</td>
<td>Cell Biology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3330</td>
<td>Genetics</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 4040</td>
<td>Molecular Biology</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

### Chemistry Minor (23-24 credits)

The Chemistry Minor is designed to provide a broader background including a chemistry perspective to students in other majors including those preparing to teach secondary school.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMISTRY 1140</td>
<td>General Chemistry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 1240</td>
<td>General Chemistry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 2150</td>
<td>Quantitative Analysis</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 3540</td>
<td>Organic Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 3510</td>
<td>Organic Chemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHEMISTRY 2730</td>
<td>Inorganic Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEMISTRY 4630</td>
<td>General Biochemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMISTRY ####</td>
<td>Chemistry Electives</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
Educational Goals and Objectives

The Engineering Physics program provides Engineering Physics majors with a high quality undergraduate education in liberal studies, mathematics, science and engineering to prepare them a) to apply fundamental physics and engineering principles, mathematics and modern engineering tools to solve engineering problems, b) to be able to approach non-traditional or multi-disciplinary engineering problems, c) as good citizens, and d) for a lifetime of learning.

Graduates of the Engineering Physics (EP) Program must fulfill the following Program Outcomes as part of their education in engineering physics:

1. Engineering physics graduates from UWP must have demonstrated:
   a. working knowledge of fundamental physics and basic electrical and/or mechanical engineering principles,
   b. the ability to identify, formulate and solve engineering problems,
   c. the ability to apply the design process to engineering problems, and
   d. the ability to formulate, conduct, analyze and interpret experiments in engineering physics.

2. Engineering physics graduates from UWP must have developed professional skills which will allow them to:
   a. communicate their ideas effectively, both orally and in writing,
   b. function effectively in multi-disciplinary teams, and
   c. use modern engineering techniques and tools, including software and laboratory instrumentation.

3. Engineering physics graduates must have the educational background to be good citizens as well as good engineers, including:
   a. an understanding of their professional and ethical responsibility to society,
   b. knowledge of and relationship between technology and society,
   c. a capacity and desire for lifelong learning to improve themselves as citizens and engineers, and
   d. a knowledge of contemporary technical issues.

Curricular Goals

The Engineering Physics curriculum is 129 credits including 55 credits of engineering. The EP program provides a balanced curriculum emphasizing physics and engineering principles with design, diverse hands-on experiences to prepare the EP graduate for the demands of laboratory or manufacturing environments and strong communication and team working skills. The engineering credits are divided nearly equally among electrical and mechanical engineering science, engineering physics and a professional engineering concentration. The EE and ME science includes introductory courses that provide the necessary prerequisites for further study in these two areas. The EP core covers nearly all the basic areas of physics with a special emphasis placed on practical problem solving, including design. The professional engineering concentration consists of electives. Here a student may tailor the program to suit individual interests by selecting from a long list of courses in electrical and mechanical engineering as well as some courses in software and industrial engineering. While students are free to choose the electives, we encourage them to select one of the following preconfigured concentrations: controls, electronics/communications, mechanical design, electric power, energy conversion (or thermo-fluid systems), software/digital or biomedical engineering.

General Requirements

Bachelor of Science Degree

Total for Graduation.................................................. 130 credits
General Education.................................................... 31 credits

Engineering Physics Major

(98 credits)

Mathematics Courses (15 credits):
MATH 2640 Calculus and Analytic Geometry I 4 cr
MATH 2740 Calculus and Analytic Geometry II 4 cr
MATH 2840 Calculus and Analytic Geometry III 4 cr
MATH 3630 Differential Equations I 3 cr

Math Electives (3 credits):
MATH 3230 Linear Algebra 3 cr
MATH 3730 Numerical Analysis 3 cr
MATH 3830 Differential Equations II 3 cr
MATH 4030 Statistical Methods with Applications 3 cr
MATH 4430 Advanced Calculus 3 cr
MATH 4530 Complex Variables 3 cr

Basic Sciences Courses (18 credits):
CHEMSTRY 1450 Chemistry for Engineers 5 cr
PHYSICS 2240 General Physics I 4 cr
PHYSICS 2340 General Physics II 4 cr
PHYSICS 3140 Modern Physics 4 cr

Other Courses:
GENENG 1000 Engineering Success Skills 1 cr
GENENG 1030 Engineering Projects 1 cr
GENENG 1320 Engineering Graphics 2 cr
COMPUTER 1430 Programming in C++ 3 cr

Engineering Science Courses (19-20 credits):
GENENG 2130 Engineering Mechanics - Statics 3 cr
ELECTENG 1210 Circuit Modeling I 3 cr
ELECTENG 2210 Circuit Modeling II 4 cr
ELECTENG 2220 Signals and Systems 4 cr
MECHNCHL 2630 Thermodynamics 3 cr
or
GENENG 2340 Mechanics of Materials 4 cr
MECHNCHL 3630 Applied Thermodynamics 2 cr
or
MECHNCHL 3830 Mechanisms and Machines 2 cr

Engineering Physics Courses (21 credits):
ENGRPHYS 3240 Applied Mechanics 4 cr
ENGRPHYS 3640 Electric and Magnetic Fields 4 cr
ENGRPHYS 4010 Engineering Physics Lab 2 cr
ENGRPHYS 4140 Applied Optics 4 cr
ENGRPHYS 4210 Sensor Lab 2 cr
ENGRPHYS 4220 Applications of Modern Physics 2 cr
ENGRPHYS 4930 Engineering Physics Design 3 cr

101
Professional Engineering Electives (15-16 credits)

Students may choose any of the 3000/4000 level Electrical Engineering and 3000/4000 level Mechanical Engineering courses, as well as a short list of Software Engineering, Industrial Engineering and Engineering Physics courses, for the Professional Engineering electives. Three of these courses must include design and at least one must be 4000 level. While the student is free to choose, the program encourages students to select courses which form a concentration. Such concentrations have been developed and are as follows:

**Controls:** EE3020, EE3310, EE4310, EE4320, EE4350  
**Mechanical Design:** ME3040, ME3330, ME3730, two of ME4440, ME4800, ME4840, ME4850  
**Electronics:** EE3020, EE3770, EE3310, EE3410, EE4440  
**Electrical Power:** EE3020, EE3410, EE4430, EE4450  
**Thermal Design:** ME3300, ME3640, three of ME4730, ME4550, ME4600, ME4520, ME4630  
**Digital:** EE3770, EE3780, EE3130, EE4720, EE4750  
**Materials:** ME3040, ME3330, ME4440, ME4430, EE3130  
**Biomedical (mechanics):** Biology 2340, IE3430, ME4440, ME3040, ME4440, ME4430  

**Grade Requirements:**
1. A “C” or better is required in PHYSICS 2240, 2340, 3140 and ENGRPHYS 4010.  
2. Only one “D” in engineering physics courses may be counted towards graduation.  
3. An average GPA of “C” (i.e. 2.00) must be maintained in all 3000/4000 engineering courses.

---

Physics Minor (24 credits)

**Minor in Physics (Science Emphasis)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICS 2240</td>
<td>General Physics I</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 2340</td>
<td>General Physics II</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 3140</td>
<td>Modern Physics</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

**Plus at least 12 credits from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICS 2610</td>
<td>General Physics II Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>PHYSICS 3240</td>
<td>Applied Mechanics</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENGRPHYS 3640</td>
<td>Electric and Magnetic Fields</td>
<td>3 cr</td>
</tr>
<tr>
<td>(Same as ELECTENG 3140)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGRPHYS 4140</td>
<td>Applied Optics</td>
<td>4 cr</td>
</tr>
<tr>
<td>(Same as ELECTENG 4620)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGRPHYS 4220</td>
<td>Applications of Modern Physics</td>
<td>2 cr</td>
</tr>
<tr>
<td>ENGRPHYS 4980</td>
<td>Special Topics in Engineering Physics</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>ENGRPHYS 4990</td>
<td>Independent Study in Engineering Physics</td>
<td>1-3 cr</td>
</tr>
</tbody>
</table>

---

**Minor in Physics (Education Emphasis)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICS 2240</td>
<td>General Physics I</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 2340</td>
<td>General Physics II</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHSC 1310</td>
<td>Introductory Astronomy Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>PHSC 1340</td>
<td>Introductory Astronomy</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 3140</td>
<td>Modern Physics</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

**Plus at least 6 credits from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTDY 2260</td>
<td>Electronic Circuits</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 2930</td>
<td>Applications of Electrical Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 2630</td>
<td>Thermoscience</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGRPHYS 3640</td>
<td>Electric and Magnetic Fields</td>
<td>3 cr</td>
</tr>
<tr>
<td>(Same as ELECTENG 3140)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGRPHYS 4140</td>
<td>Applied Optics</td>
<td>4 cr</td>
</tr>
<tr>
<td>(Same as ELECTENG 4620)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGRPHYS 4220</td>
<td>Applications of Modern Physics</td>
<td>2 cr</td>
</tr>
<tr>
<td>ENGRPHYS 4980</td>
<td>Special Topics in Engineering Physics</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>ENGRPHYS 4990</td>
<td>Independent Study in Engineering Physics</td>
<td>1-2 cr</td>
</tr>
</tbody>
</table>
# Broad Field Science Comprehensive Major

The Broad Field Science Comprehensive major (along with an early adolescence-adolescence education program) is designed to prepare students for early adolescence-adolescence certification in broad field science and upper-level certification in the areas of concentration.

The requirements for an interdepartmental broad field science major include:

A foundation of required courses from each of the four science areas (39-40 credits):

### Biology
- **BIOLOGY 1650 The Unity of Life** 5 cr
- **BIOLOGY 1750 The Diversity of Life** 5 cr

### Chemistry
- **CHEMISTRY 1140** General Chemistry I 4 cr
- **CHEMISTRY 1240** General Chemistry II 4 cr

### Earth and Space Science
- **PHSC 1340** Astronomy 4 cr
- **PHSC 1310** Astronomy Lab I 1 cr
- **GEOGRPHY 1240** Weather and Climate 4 cr

**One course from:**
- **GEOLOGY 1140** Physical Geology 4 cr
- **GEOGRPHY 1140** Global Landforms 4 cr

### Physics
- **PHYSICS 1350** Introductory Physics I 5 cr
- **PHYSICS 1450** Introductory Physics II 5 cr

Or the sequence PHYSICS 2510, 2530, 2610, 2640, for 9 credits

Approved concentrations from two of the science areas or a minor in one area (14-24 credits):

<table>
<thead>
<tr>
<th>Area</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>BIOLOGY 3230 Mammalogy</td>
<td>3 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOLOGY 3450 Ecology and Evaluation</td>
<td>3 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOLOGY 2240 Anatomy and Physiology II</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOLOGY 2340 Essentials of Anatomy and Physiology</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEMISTRY 2150 Quantitative Analysis</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEMISTRY 3540 Organic Chemistry Lecture</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEMISTRY 3510 Organic Chemistry Lab</td>
<td>1 cr</td>
<td></td>
</tr>
<tr>
<td>Earth and Space Science</td>
<td>GEOLOGY 1140 Physical Geology</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOLOGY 1240 Historical Geology</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOLOGY 3040 Mineralogy and Lithology</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOLOGY 3430 Hydrogeology</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>MATH 2740 Calculus and Analytic Geometry II</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 2840 Calculus and Analytic Geometry III</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYSICS 3140 Modern Physics I</td>
<td>4 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INDUSTDY 2260 Electronic Circuits</td>
<td>3 cr</td>
<td></td>
</tr>
<tr>
<td>Mathematics sequence (6-9 credits):</td>
<td>MATH 2530 Trigonometry and Analytical Geometry</td>
<td>3 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 2450 Precalculus</td>
<td>5 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1830 Statistics</td>
<td>3 cr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 2640 Calculus and Analytic Geometry I</td>
<td>4 cr</td>
<td></td>
</tr>
</tbody>
</table>

Demonstrate proficiency with microcomputer applications.
**Natural Science Minor**

The Natural Science Minor is only available to B-11 or middle level education majors.

*A minimum of one course (or lecture and lab combination) from:*

<table>
<thead>
<tr>
<th>Astronomy</th>
<th>1340 Introductory Astronomy</th>
<th>4 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>and</td>
<td>1310 Introductory Astronomy Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td><strong>Biology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOLOGY 1150</td>
<td>General Biology</td>
<td>5 cr</td>
</tr>
<tr>
<td>BIOLOGY 1350</td>
<td>General Botany*</td>
<td>5 cr</td>
</tr>
<tr>
<td><strong>Chemistry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEMISTRY 1050</td>
<td>General Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 1140</td>
<td>General Chemistry*</td>
<td>4 cr</td>
</tr>
<tr>
<td><strong>Geosciences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOGRAPHY 1040</td>
<td>Planet Earth</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRAPHY 1140</td>
<td>Global Landforms</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRAPHY 1240</td>
<td>Physical Geography:</td>
<td>4 cr</td>
</tr>
<tr>
<td></td>
<td>Weather and Climate*</td>
<td></td>
</tr>
<tr>
<td>GEOLOGY 1140</td>
<td>Physical Geography</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOLOGY 1240</td>
<td>Historical Geography</td>
<td>4 cr</td>
</tr>
<tr>
<td><strong>Physics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICS 1150</td>
<td>Physical Science</td>
<td>5 cr</td>
</tr>
<tr>
<td>PHYSICS 1050</td>
<td>Principles of Physics</td>
<td>5 cr</td>
</tr>
<tr>
<td>PHYSICS 1350</td>
<td>Introductory Physics I*</td>
<td>5 cr</td>
</tr>
</tbody>
</table>

*Must be selected if this science area is chosen to satisfy the two-semester concentration specified in part 2.

A two-semester concentration is required in one science area.

<table>
<thead>
<tr>
<th>Biology</th>
<th>1650 The Unity of Life</th>
<th>5 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY 1750</td>
<td>The Diversity of Life</td>
<td>5 cr</td>
</tr>
<tr>
<td><strong>Chemistry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEMISTRY 1140</td>
<td>General Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMISTRY 1240</td>
<td>General Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td><strong>Geosciences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOGRAPHY 1240</td>
<td>Physical Geography</td>
<td>4 cr</td>
</tr>
<tr>
<td><strong>And one course from:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOGRAPHY 1040</td>
<td>Planet Earth</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRAPHY 1140</td>
<td>Global Landforms</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOLOGY 1140</td>
<td>Physical Geology</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOLOGY 1240</td>
<td>Historical Geology</td>
<td>3 cr</td>
</tr>
<tr>
<td><strong>Physics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICS 1350</td>
<td>Introductory Physics I</td>
<td>5 cr</td>
</tr>
<tr>
<td>PHYSICS 1450</td>
<td>Introductory Physics II</td>
<td>5 cr</td>
</tr>
</tbody>
</table>
Civil and Environmental Engineering Program

Vision, Objectives and Outcomes

Vision

The vision of the CEE Department is to provide the education and training to create citizen engineers who will be leaders in the civil and environmental engineering profession and in their communities. Citizen engineers are:

- Able to address technical and non-technical issues
- Attuned to the needs of their community and nation
- Able and willing to engage in public policy
- Appreciative of sustainability
- Ethical
- Innovative, but aware of risk
- Lifelong learners

Program Objectives

In order to achieve the CEE Department's mission, graduates of the department will:

1. Effectively and accurately communicate with technical and non-technical audiences.
2. Successfully apply technical knowledge to solve engineering problems to satisfy client, industry and governmental requirements.
3. Have the ability to evaluate projects from a holistic perspective including some or all of the following: sustainability, environmental impacts, ethics, aesthetics, politics, historical perspectives, social impacts, technical needs and costs.
4. Make significant and innovative contributions in their professional endeavors.
5. Become registered professional engineers.

The realization of these objectives is expected to occur within five years of graduation. In order to ensure that graduates are adequately prepared to meet these objectives, the CEE Department program outcomes define the competencies that students are expected to demonstrate at graduation.

Program Outcomes

The following Program Outcomes are designed to produce graduates who will meet the program objectives:

1. Our graduates are technically skilled in math and science. They skillfully apply math (calculus and differential equations) and science (calculus-based physics, chemistry and one additional area of science) to solve engineering problems.
2. Our graduates are technically skilled in civil and environmental engineering. They can solve civil and environmental engineering problems in four or more emphasis areas. Such engineering problems involve design, experimentation and data analysis. To solve the problems, graduates use the techniques, skills and tools of modern engineering practice.
3. Our graduates are innovative. They are able to design civil and environmental engineering experiments. To continue to be innovative, they must be able to learn and apply new information.

4. Our graduates conduct themselves in a manner becoming of a Professional Engineer. They are able to determine a professional and ethical course of action, and can function effectively on multidisciplinary teams.

5. Our graduates are skillful communicators. They effectively express their ideas to a variety of audiences orally and in writing.

6. Our graduates are broadly educated. They are aware of contemporary issues and are ready to practice engineering with an awareness of global and societal contexts. Furthermore, they are able to explain how basic concepts in management, business, public policy and leadership affect their engineering solutions.

Civil Engineering

Contact: Mark S. Meyers, P.E.
Office: 141 Ottensman Hall
Phone: 608.342.1543
E-mail: meyersm@uwplatt.edu

The Civil Engineering program gives students a broad background in all areas of civil engineering, while permitting specialization in the senior year. Practical applications are emphasized with sufficient theory so that the individual can grow with the future as new materials, methods and designs develop. The program has outstanding laboratory and computer facilities where all students gain valuable hands-on practical experience. The use of computers and state-of-the-practice equipment are integrated throughout the curriculum from freshman through senior year to collect information, analyze data and develop plans for projects.

Civil Engineers plan, design and supervise construction of facilities that serve people. These facilities include highways that connect our nation’s cities, airports that serve travelers, bridges that span our rivers and harbors, dams and levees that control floods and supply water for cities and wastewater treatment plants that protect the environment. Civil Engineers also work with architects to design and supervise construction of buildings.

The Civil Engineering design process begins with the accumulation and analysis of basic information about a project. This information may include the topography and geology for a highway; the flood history of a river that must be bridged or dammed; population growth projections and water usage; laboratory analysis of construction materials; or pollution surveys of air, land and water. Using this information, civil engineers apply their knowledge of science and engineering design to meet a project’s requirements, assuring its successful completion.

General Requirements

Bachelor of Science Degree
Total for Graduation ..................................................... 134 credits
Major Studies ............................................................... 103 credits
Civil Engineering Major  
(103 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2640</td>
<td>Calculus and Analytic Geometry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2740</td>
<td>Calculus and Analytic Geometry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2840</td>
<td>Calculus and Analytic Geometry III</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 3630</td>
<td>Differential Equations I</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 4030</td>
<td>Statistical Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 1450</td>
<td>Chemistry for Engineers</td>
<td>5 cr</td>
</tr>
<tr>
<td>PHYSICS 2240</td>
<td>General Physics I</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 2340</td>
<td>General Physics II</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOLOGY 3130</td>
<td>Engineering Geology</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 1000</td>
<td>Introduction to Engineering</td>
<td>1 cr</td>
</tr>
<tr>
<td>GENENG 1030</td>
<td>Engineering Projects</td>
<td>1 cr</td>
</tr>
<tr>
<td>GENENG 1320</td>
<td>Engineering Computer Graphics</td>
<td>2 cr</td>
</tr>
<tr>
<td>GENENG 2820</td>
<td>Engineering Economy</td>
<td>2 cr</td>
</tr>
<tr>
<td>CIVILENG 2630</td>
<td>Elements of Surveying</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 2130</td>
<td>Engineering Mechanics - Statics</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 2220</td>
<td>Engineering Mechanics - Dynamics</td>
<td>2 cr</td>
</tr>
<tr>
<td>GENENG 2340</td>
<td>Mechanics of Materials</td>
<td>4 cr</td>
</tr>
<tr>
<td>GENENG 2630</td>
<td>Basic Thermoscience for Engineers</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 2930</td>
<td>Applications of Electrical Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 2120</td>
<td>Computer Applications</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 3020</td>
<td>Construction Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 3030</td>
<td>Construction Materials</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 3100</td>
<td>Structural Mechanics</td>
<td>4 cr</td>
</tr>
<tr>
<td>CIVILENG 3150</td>
<td>Reinforced Concrete</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 3300</td>
<td>Fluid Mechanics</td>
<td>4 cr</td>
</tr>
<tr>
<td>CIVILENG 3340</td>
<td>Environmental Engineering</td>
<td>4 cr</td>
</tr>
<tr>
<td>CIVILENG 3530</td>
<td>Transportation Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 3730</td>
<td>Geotechnical Engineering I</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4930</td>
<td>Design Project</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Civil Engineering Technical Electives

All students must complete one of the following areas with a minimum of 14 credits.

**Construction Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVILENG 4020</td>
<td>Cost and Estimates</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4030</td>
<td>Construction Equipment</td>
<td>2 cr</td>
</tr>
<tr>
<td>CIVILENG 4040</td>
<td>Construction Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG ######</td>
<td>Any 4000 CIVILENG Class</td>
<td>6 cr</td>
</tr>
</tbody>
</table>

**Geotechnical Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVILENG 4160</td>
<td>Foundation Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4730</td>
<td>Geotechnical Engineering II</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG ######</td>
<td>Any 4000 level CIVILENG Class</td>
<td>8 cr</td>
</tr>
</tbody>
</table>

**Environmental Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVILENG 4410</td>
<td>Wastewater and Drinking</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG ####</td>
<td>Water Treatment (Required)</td>
<td>5 cr</td>
</tr>
</tbody>
</table>

**And any two courses from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVILENG 4300</td>
<td>Hydrology</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4310</td>
<td>Ground Water Hydrology</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4330</td>
<td>Solid and Hazardous Waste</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4400</td>
<td>Municipal Hydraulics</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4440</td>
<td>Stormwater, Wetlands</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Structural Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVILENG 4100</td>
<td>Computer Analysis of Structures</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4160</td>
<td>Foundation Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4230</td>
<td>Steel Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG ####</td>
<td>Any 4000 CIVILENG Class</td>
<td>5 cr</td>
</tr>
</tbody>
</table>

**Transportation Engineering**

*Any three courses from:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVILENG 4300</td>
<td>Hydrology</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4500</td>
<td>Highway Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4520</td>
<td>Pavement Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4550</td>
<td>Traffic Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4560</td>
<td>Pavement Maintenance and Rehabilitation</td>
<td>2 cr</td>
</tr>
<tr>
<td>CIVILENG ####</td>
<td>Any 4000 CIVILENG Class</td>
<td>5 cr</td>
</tr>
</tbody>
</table>

**Municipal Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVILENG 4300</td>
<td>Hydrology</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4400</td>
<td>Municipal Hydraulics</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4500</td>
<td>Highway Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4550</td>
<td>Traffic Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4520</td>
<td>Pavement Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>CIVILENG 4560</td>
<td>Pavement Maintenance and Rehabilitation</td>
<td>2 cr</td>
</tr>
<tr>
<td>CIVILENG ####</td>
<td>Any 4000 CIVILENG Class</td>
<td>2-3 cr</td>
</tr>
</tbody>
</table>

**Program Requirements:** A grade of “C” or higher must be earned in all 3000 level CIVILENG courses in order to graduate.
The Environmental Engineering Program provides a balance between basic science, engineering science and engineering design. The purpose of the curriculum is to develop in each student a thorough understanding of the underlying environmental principles in the basic sciences along with practical applications in engineering design. Although emphasis is placed upon learning the fundamentals, each student will be encouraged to develop excellent technical and communication skills, become broadly educated and become a productive member of society.

The Environmental Engineering Program is designed to give students a broad background in all areas of environmental engineering. These include water and wastewater treatment, environmental and occupational health, solid waste management, water resources, environmental modeling and environmental chemistry. Practical applications are emphasized with sufficient theory so that the individual can develop innovative solutions as new problems are encountered.

Environmental Engineering is the application of scientific and engineering principles to improve and maintain the environment for the protection of human health, for the protection of nature’s beneficial ecosystems and biodiversity and for environment-related enhancement of the quality of human life. Through education and experience, environmental engineers develop an understanding of the earth’s biological, chemical, physical and geological systems. They use this information to develop engineering plans for solutions to environmental problems caused by pollution. They also develop pollution prevention plans to keep environmental problems from developing in the first place.

Environmental Engineers conduct studies of streams, lakes, air, soil and groundwater that are polluted to determine the extent and severity of contamination. These environmental measurements provide the basis for engineers to design treatment and remediation processes to remove and/or degrade pollutants. Environmental scientists and environmental engineers work together with city or county officials, regulatory officials, consultants and nearby residents to achieve a solution to pollution problems.

General Requirements

Bachelor of Science Degree

Total for Graduation ..................................................... 132 credits
Major Studies ........................................................................ 101 credits

Environmental Engineering Major
(101 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2640</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2740</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2840</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 3630</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 4030</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 1450</td>
<td>5 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3130</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3110</td>
<td>1 cr</td>
</tr>
<tr>
<td>BIOLOGY 3240</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 2240</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOLOGY 3130</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 1140</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMSTRY</td>
<td></td>
</tr>
<tr>
<td>BIOLOGY</td>
<td></td>
</tr>
<tr>
<td>PHYSICS</td>
<td></td>
</tr>
<tr>
<td>GEOLOGY</td>
<td></td>
</tr>
</tbody>
</table>

General Requirements:

A grade of “C” or higher must be earned in all 3000 level CIVILENG courses in order to graduate.
**DEPARTMENT OF COMPUTER SCIENCE AND SOFTWARE ENGINEERING**

**Department Chair:** Mohan Gill  
**Office:** 208 Ullrich  
**Phone:** 608.342.1625  
**E-mail:** gill@uwplatt.edu

**Academic Department Associate:**  
Mary Jo Stutenberg

**MAJORS**

**Computer Science**  
- Computer Technology Emphasis  
- Computer Information Systems Emphasis  

**Software Engineering**  
- Digital Application Domain Sequence  
- Controls Application Domain Sequence Track 1  
- Controls Application Domain Sequence Track 2  
- Engineering Management Emphasis

**MINORS**  
- Computer Science

**About the Department and Majors**

The Department of Computer Science and Software Engineering offers two majors: one in computer science and one in software engineering. Students may also earn a minor in computer science from this department.

Computer science is concerned with the theory and practice involved in the feasibility, design, implementation and evaluation of every aspect of computing. In addition to the valuable practical skills acquired in the study of computer science, the concepts and theories in the field provide exposure to some of the most imaginative and challenging ideas in the history of human intellectual development. The program is committed to blending the theory of computer science with the arts of programming and analysis, while providing attention to the business, ethical and moral aspects of computing in our society. Graduates are prepared for such positions as systems and applications programmers, analysts and various computer specialist positions.

**COMPUTER SCIENCE**

**Coordinator:** Mohan Gill  
**Office:** 208 Ullrich Hall  
**Phone:** 608.342.1625  
**E-mail:** gill@uwplatt.edu

**Professors:**  
Mohan Gill  
Tom Scanlan

**Associate Professor:**  
Qi Yang

**Assistant Professor:**  
Lisa Landgraf

**Lecturer:**  
Donna Gavin

**Computer Science Mission Statement**

The mission of the Computer Science Program is to provide a quality computer science education with significant hands-on and laboratory experience that will enable our graduates to practice their profession with proficiency and integrity.

**Computer Science Goals**

**Graduates are expected to have:**  
1. the ability to apply the principles of analysis and design to software development  
2. knowledge of data structures, databases, algorithms, computer architecture and operating systems  
3. the ability to develop effective software tests at the unit and system level  
4. knowledge about the tools and environments used for software development  
5. written and oral communication skills, ethics and professionalism to function effectively on software development teams, and in society in general; an  
6. the ability to engage in lifelong learning and recognize its importance

**Computer Science Outcomes**

1. **Foundation:** Graduates will have a solid foundation in computer science. These graduates will be able to apply this fundamental knowledge to both their immediate professional software development tasks, as well as to acquiring new professional skills throughout their lifetime.  
2. **Development:** Graduates will be able to engage in effective software development practices over the entire system life cycle. This includes requirements, analysis, design, implementation and testing.
3. **Professionalism**: Graduates will conduct themselves ethically, honestly and professionally in all work environment activities. These activities include all interactions with employers, team members and peers, as well as customers.

4. **Quality**: Graduates will use industry recognized best practices to design, develop and deliver software that meets or exceeds applicable standards for utility, reliability, robustness, performance, correctness, maintainability, reusability, portability and economy.

5. **Presentation**: Graduates will be capable of effective written and oral communication. Graduates will be capable of preparing and publishing the necessary project documents involved in the specification, design, testing and deployment of software. Graduates will also be capable of actively participating in customary project discussions, walk-throughs, reviews and inspections.

6. **Growth**: Graduates will be able to provide themselves with lifelong learning capabilities, such as the ability to learn new tools, to study new language processes and generally adapt to new surroundings throughout their careers. This outcome is particularly critical due to the rapid evolution and rapid obsolescence of computer science knowledge and practices.

## Computer Science Major

The computer science major leads to a Bachelor of Arts or Bachelor of Science degree in two emphases: computer information systems and computer technology. The department offers a general minor. In addition, selected course sequences form emphases in computer science for a variety of other majors in the university.

### Bachelor of Science Degree

- **Total for Graduation**: 120 credits
- **General Education**: 43-57 credits
- **Major**: 67-72 credits

### Bachelor of Arts Degree

- **Total for Graduation**: 120 credits
- **General Education**: 43-57 credits (includes an additional 9 credits in upper division course work in Humanities, Fine Arts or Social Sciences)
- **Major**: 67-72 credits

Students completing a Bachelor of Arts degree in computer science must complete an additional 9 credits of upper-division course work from Humanities, Fine Arts or Social Sciences in addition to the course work specified for their chosen emphasis and university requirements.

Students completing a Bachelor of Science degree in computer science need only to complete the course work specified for their chosen emphasis and university requirements. All computer science majors must complete at least 38 credits in computer science (not including Computer Science 1130, 1830 or 2830) and the requirements in one of the emphases areas of computer information systems or computer technology.

All Computer Science majors must earn at least a “C” in each Computer Science course listed as a requirement in the emphasis selected and each Computer Science course listed in the core requirements.

## Major Core Requirements

### Required Courses (26 credits):

- **COMPUTER 1010** Introduction to Computer Science 1 cr
- **COMPUTER 1430** Programming in C++ 3 cr
- **COMPUTER 2230** Programming in COBOL 3 cr
- **COMPUTER 2430** Object Oriented Programming and Data Structures I 3 cr
- **COMPUTER 3230** Computer Architecture/Operating Systems 3 cr
- **COMPUTER 3630** Database Design and Implementation 3 cr
- **COMPUTER 4110** Seminar 1 cr
- **ECONOMIC 2130** Principles of Macroeconomics 3 cr
- **ECONOMIC 2230** Principles of Microeconomics 3 cr
- **ENGLISH 3000** Technical Writing 3 cr
- **BUSADMIN 2330** Leadership and Management 3 cr

## Computer Technology Emphasis

### Required Courses (22 credits):

- **COMPUTER 2630** Object Oriented Programming Data Structures II 3 cr
- **COMPUTER 3430** Object Oriented Analysis and Design 3 cr
- **COMPUTER 3520** Programming Language Structures 3 cr
- **COMPUTER 3830** Data Communication and Computer Networking 3 cr
- **MATH 2640** Calculus and Analytical Geometry I 4 cr
- **MATH 2730** Discrete Mathematics 3 cr
- **SOFTWARE 4130** Real-Time Embedded Systems Programming 3 cr
- **SOFTWARE 4330** Software Engineering Project I 3 cr
- **SOFTWARE 4730** Software Engineering Project II 3 cr
- **ELECTENG 3770** Logic and Digital Design 3 cr
- **ELECTENG 3780** Introduction to Microprocessors 3 cr

*COMPUTER 4830, COMPUTER 4930 and COMPUTER 4990 can be counted only with the consent of the department.

### Electives (9 credits):

- **COMPUTER 3000-level and up**
- **SOFTWARE 3330** Intermediate Software Engineering 3 cr
- **SOFTWARE 3730** Software Quality 3 cr
- **SOFTWARE 3860** Software Maintenance and Reengineering 3 cr
- **SOFTWARE 4130** Real-Time Embedded Systems Programming 3 cr
- **SOFTWARE 4430** Software Engineering Project I 3 cr
- **SOFTWARE 4730** Software Engineering Project II 3 cr
- **ELECTENG 3770** Logic and Digital Design 3 cr
- **ELECTENG 3780** Introduction to Microprocessors 3 cr

### Application Domain Electives (12 credits)

Select 12 credits in a discipline other than Computer Science with at least 3 credits at the 3000 level or higher. At most, two courses can be below the 2000 level. If Software Engineering or Electrical Engineering is chosen, the selected courses cannot also be selected as Technical Electives. If Software Engineering is chosen, **SOFTWARE 2430, SOFTWARE 2630, SOFTWARE 2730 and SOFTWARE 3430 cannot be counted. If Mathematics is chosen, the courses must be from courses **MATH 2640 and higher. If English is chosen, **ENGLISH 1130 and ENGLISH 1230 cannot be counted. The Economics, English, Mathematics and Business courses listed as required courses can count towards the 12 credits of domain electives.
### Computer Information Systems Emphasis

#### Required Courses (30-31 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPUTER 3130</td>
<td>Systems Analysis and Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 3530</td>
<td>Systems Develop and Implementation</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 4230</td>
<td>Applications in Information Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACCTING 2010</td>
<td>Financial Accounting I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACCTING 2020</td>
<td>Management Accounting II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACCTING 3000</td>
<td>Accounting Issues for Managers</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td>ACCTING 3010</td>
<td>Intermediate Accounting I</td>
</tr>
<tr>
<td>or</td>
<td>ACCTING 3230</td>
<td>Cost Accounting</td>
</tr>
<tr>
<td>or</td>
<td>BUSADMIN 1300</td>
<td>Global Business</td>
</tr>
<tr>
<td>or</td>
<td>BUSADMIN 4100</td>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>or</td>
<td>ECONOMIC 2410</td>
<td>Interpretation of Business and Economic Data</td>
</tr>
<tr>
<td>or</td>
<td>MATH 1830</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>or</td>
<td>MATH 4030</td>
<td>Statistical Methods with Applications</td>
</tr>
<tr>
<td>or</td>
<td>MATH 2630</td>
<td>Calculus with Applications</td>
</tr>
<tr>
<td>or</td>
<td>MATH 2640</td>
<td>Calculus and Analytic Geometry I</td>
</tr>
</tbody>
</table>

#### Electives (12 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPUTER 2340</td>
<td>Programming in Visual Basic</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 2630</td>
<td>Object Oriented Programming and Data Structures II</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 3340</td>
<td>Windows Programming</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 3640</td>
<td>Client/Server Programming</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 3830</td>
<td>Data Communication and Computer Networks</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 3870</td>
<td>Web Protocols, Technologies and Applications</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 3930</td>
<td>CICS Application Programming</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 2990, COMPUTER 4830, COMPUTER 4930 and COMPUTER 4990 can be counted only with the consent of the department.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Minor in Computer Science (24 credits)

The minor provides sufficient flexibility to complement any major field of study. Completion of the minor is sufficient for a certified teacher to be licensed to teach computer science in Wisconsin.

#### Required Courses (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPUTER 1430</td>
<td>Programming in C++</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 2430</td>
<td>Object Oriented Programming Data Structures I</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMPUTER 3230</td>
<td>Computer Arch Operating Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td>ELECTENG 3780</td>
<td>Introduction to Microprocessors</td>
</tr>
</tbody>
</table>

#### Electives (15 credits):

Electives for the minor may be selected from any courses in computer science, software engineering or Electrical Engineering 3770. All required courses must be passed with a C or better. Minimum cumulative GPA of 2.00 in the electives. We suggest that students consult with a computer science advisor to plan a minor program.

## SOFTWARE ENGINEERING

[www.uwplatt.edu/csse/](http://www.uwplatt.edu/csse/)

**Coordinator:** Joe Clifton  
**Office:** 214 Ullrich Hall  
**Phone:** 608.342.1558  
**E-mail:** clifton@uwplatt.edu

**Professors:**  
Joe Clifton  
Robert Hasker

**Associate Professor:**  
Mike Rowe

**Assistant Professor:**  
Syed (Shawon) Rahman

### Software Engineering Mission Statement

The mission of the Software Engineering Program is to provide a quality software engineering education with significant hands-on and laboratory experience that will enable our graduates to practice their profession with proficiency and integrity.

### Software Engineering Objectives

1. Graduates are effective team members, aware of cultural diversity, who conduct themselves ethically and professionally.
2. Graduates use effective communication skills to assure production of quality software, on time and within budget.
3. Graduates build upon and adapt knowledge of science, mathematics and engineering to take on more expansive tasks that require an increased level of self-reliance, technical expertise and leadership.

### Software Engineering Outcomes

The following are the Software Engineering Outcomes expected of the graduates of this program:

1. **Foundation:** Graduates shall have a strong foundation in science, mathematics, and engineering, and can apply this fundamental knowledge to software engineering tasks.
2. **Development:** Graduates can effectively apply software engineering practice over the entire system life cycle. This includes requirements engineering, analysis, prototyping, design, implementation, testing, maintenance activities and management of risks involved in software and embedded systems.
3. **Process:** Graduates know various classical and evolving software engineering methods, can select appropriate methods for projects and development teams and can refine and apply them to achieve project goals.
4. **Professionalism:** Graduates are knowledgeable of the ethics, professionalism and cultural diversity in the work environment.
5. **Quality:** Graduates can apply basic software quality assurance practices to ensure that software design, development and maintenance meets or exceeds applicable standards.
6. **Presentation:** Graduates have effective written and oral communication skills. Graduates can prepare and publish the necessary documents required throughout the project life cycle. Graduates can effectively contribute to project discussions, presentations, and reviews.
7. **Growth:** Graduates understand the need for lifelong learning and can readily adapt to new software engineering environments.
General Requirements
Bachelor of Science Degree
Total for Graduation ..............................................127-130 credits
Major .................................................................102-105 credits

Software Engineering majors must earn a “C” or better in all required Software Engineering and Computer Science courses. SE majors must earn a “D” or better in all corequisites, unless otherwise stipulated by the offering department. For example, a “C” or better is required in PHYSICS 2240 in order to proceed to PHYSICS 2340. However, a “D” in PHYSICS 2340 would satisfy the SE requirement for that course. Likewise, a “D” would satisfy the SE requirement for CS courses for which there is an option: COMPUTER 3030, COMPUTER 3630 and COMPUTER 3920. An SE major may repeat any given Engineering course only one time.

Software Engineering Major
(102-105 credits)

Mathematics (21 credits)

MATH 2640 Calculus and Analytic Geometry I 4 cr
MATH 2740 Calculus and Analytic Geometry II 4 cr
MATH 2840 Calculus and Analytic Geometry III 4 cr
MATH 2730 Discrete Mathematics 3 cr
MATH 4030 Statistical Methods with Applications 3 cr
MATH 3230 Linear Algebra 3 cr
or
MATH 3630 Differential Equations I 3 cr

Basic Sciences (12 credits)

PHYSICS 2240 General Physics I 4 cr
PHYSICS 2340 General Physics II 4 cr
Non-Physics course 4 cr

Software Engineering Required Courses (31 credits)

SOFTWARE 2430 Object-Oriented Programming and Data Structures I 3 cr
SOFTWARE 2630 Object-Oriented Programming and Data Structures II 3 cr
SOFTWARE 2730 Introduction to Software Engineering 3 cr
SOFTWARE 3330 Intermediate Software Engineering 3 cr
SOFTWARE 3430 Object-Oriented Analysis and Design 3 cr
SOFTWARE 3730 Software Quality 3 cr
SOFTWARE 3860 Software Maintenance and Reengineering 3 cr
SOFTWARE 4110 Software Engineering Seminar 1 cr
SOFTWARE 4130 Real-time Embedded Systems Programming 3 cr
SOFTWARE 4330 Software Engineering Project I 3 cr
SOFTWARE 4730 Software Engineering Project II 3 cr

Computer Science Required Courses (15-16 credits)

COMPUTER 1430 Programming in C++ 3 cr
COMPUTER 3230 Computer Architecture and Operating Systems 3 cr
COMPUTER 3520 Programming Language Structures 3 cr
COMPUTER 3030 Artificial Intelligence 3 cr
or
COMPUTER 3630 Database Design and Implementation 3 cr
or
COMPUTER 3920 Computer Graphics 3 cr
or
ELECTENG 4720 Microprocessor Architecture and Interfacing 4 cr
COMPUTER 3830 Data Communication and Computer Networks 3 cr

Other Required Courses (11 credits)

GENENG 1000 Engineering Success Skills 1 cr
GENENG 1030 Introduction to Engineering Projects 1 cr
BUSADMIN 2330 Organization and Management 3 cr
ECONOMIC 2130 Principles of Macroeconomics 3 cr
or
ECONOMIC 2230 Principles of Macroeconomics 3 cr
PHLSPHY 2540 Science, Technology and Ethics 3 cr

Application Domain Sequence (12-15 credits)

Select one application domain sequence from:

Digital (12 credits)

ELECTENG 1020 Electrical Engineering Projects and Tools 1 cr
ELECTENG 1210 Circuit Modeling I 3 cr
ELECTENG 3770 Logic and Digital Design 4 cr
ELECTENG 3780 Introduction to Microprocessors 4 cr

Controls Track 1 (15 credits)

ELECTENG 1210 Circuit Modeling I 3 cr
ELECTENG 2210 Circuit Modeling II 4 cr
ELECTENG 2220 Signals and Systems 4 cr
ELECTENG 3300/MECHNCHL 4310 Automatic Controls Laboratory 1 cr
ELECTENG 3310 Automatic Controls 3 cr

Controls Track 2 (15 credits)*

GENENG 2130 Engineering Mechanics-Statics 3 cr
GENENG 2230 Engineering Mechanics-Dynamics 3 cr
GENENG 2930 Applications of Electrical Engineering 3 cr
MECHNCHL 3030 Dynamical Systems 3 cr
MECHNCHL 4310/ELECTENG 3300 Automatic Controls Laboratory 1 cr
MECHNCHL 4320 Automatic Controls 2 cr

* Assumes MATH 3630 is taken as the Math elective

Engineering Management (15 credits)**

INDSTENG 3430 Human Factors Engineering 3 cr
INDSTENG 3530 Operations Research I 3 cr
INDSTENG 4430 Total Quality Management 3 cr
INDSTENG 4730 Engineering Management 3 cr
INDSTENG 4750 Principles and Applications of Project Management 3 cr
or
INDSTENG 4780 Principles and Design of Engineering Management Information Systems 3 cr

** Assumes BIOLOGY 2340 is taken as the Natural Science elective and MATH 4030 is scheduled early in the curriculum sequence.
Chair: Philip Sealy
Office: 327 Engineering Hall
Phone: 608.342.1536
E-mail: sealy@uwplatt.edu

Professors:
David M. Drury
Yong Y. Li
Mesut Muslu
Piyare L. Sharma
Richard D. Shultz

Associate Professors:
Dale Buechler
Nader Safari-Shad
Gang Feng
Xiaomin Kou
Philip J. Sealy

Assistant Professors:
Liya Ni
Steven Popovich

Lecturer:
John Goomey

Academic Department Associate:
Rose Durni

Educational Mission, Goals and Expected Student Learning Outcomes

Mission statement: The mission of the Electrical Engineering Department is to provide a quality electrical engineering education with extensive hands-on and laboratory experience that will enable our graduates to practice their profession with proficiency and integrity.

The educational goals are to graduate engineers who

1. have the ability to use modern analysis and design techniques and have the laboratory skills to use state-of-the-art equipment to solve practical engineering problems.

The expected student learning outcomes of this goal are to graduate engineers who have

a. the ability to apply science, engineering science and mathematics to solve engineering problems.
b. the ability to put their engineering and design skills into practice.
c. the ability to use industrial-quality laboratory equipment and engineering software for analysis, testing, design and communication.
d. the ability to design systems, components and processes that satisfy predetermined constraints.
e. the ability to recognize engineering problems, put them in solvable form and develop and evaluate alternative solutions.

2. have the professional skills to function effectively in the work environment as well as in the community.

The expected student learning outcomes of this goal are to graduate engineers who have:

a. the ability to communicate their ideas and designs clearly orally, in written form and graphically.
b. the ability to work as members of a team.
c. had the opportunity to develop leadership skills.

3. have a solid understanding of professional and ethical responsibility.

The expected student learning outcome of this goal is to graduate engineers who:

a. understand ethical principles and their role in the engineering profession.

4. have a broad education in order to understand contemporary issues and the impacts of technology on society and the environment.

The expected student learning outcomes of this goal are to graduate engineers who:

a. have sufficient knowledge of the humanities and social sciences to understand contemporary issues concerning the interaction between technology and society.
b. understand that the products they develop and the methods used to manufacture them can affect the environment.

About the Department and Major

The Department of Electrical Engineering offers a Bachelor of Science degree in electrical engineering. The electrical engineering degree requirements include completion of at least one of the emphases: controls, computers, power and energy, or communications and electronics. The program has outstanding laboratory and computer facilities where all students gain hands-on practical experience. Students graduate with a broad background in electrical engineering and are ready to take their place in industry.

Electrical engineers design, plan and supervise the construction and maintenance of electrical and electronic equipment, computers or control systems. The variety of an electrical engineer's work can range from the smallest integrated circuit to power systems that cover entire states. Virtually every device that is either plugged in or runs on batteries has had an electrical engineer involved in its design or construction somewhere in its development.
5. have the ability to engage in lifelong learning and recognize its importance.

The expected student learning outcomes of this goal are to graduate engineers who:

a. realize that the practice of electrical engineering is constantly evolving and that engineers must have the ability to acquire new knowledge and skills on their own.
b. have the ability to earn graduate degrees or pursue other continuing education opportunities.

General Requirements
Bachelor of Science Degree
Total for Graduation ..................................................... 131 credits
Major Studies ............................................................... 103 credits

Grades of “C” or better are required in all courses that are prerequisites to electrical engineering courses.

Electrical Engineering Major
(103 credits)

Mathematics Courses (15 credits):
MATH 2640 Calculus and Analytic Geometry I 4 cr
MATH 2740 Calculus and Analytic Geometry II 4 cr
MATH 2840 Calculus and Analytic Geometry III 4 cr
MATH 3630 Differential Equations I 3 cr

Advanced Math Electives (3 credits):
MATH 2730 Discrete Mathematics 3 cr
MATH 3230 Linear Algebra 3 cr
MATH 3830 Differential Equations II 3 cr
MATH 4030 Statistical Methods with Applications 3 cr
MATH 4430 Advanced Calculus 3 cr
MATH 4530 Complex Variables 3 cr

Basic Sciences Courses (17 credits):
CHEMISTRY 1450 Chemistry for Engineers 5 cr
PHYSICS 2240 General Physics I 4 cr
PHYSICS 2340 General Physics II 4 cr
PHYSICS 3140 Modern Physics 4 cr

Other Courses (10 credits):
GENENG 1000 Engineering Success Skills 1 cr
GENENG 1030 Introduction to Engineering Projects 1 cr
GENENG 2820 Engineering Economy 2 cr
COMPUTER 1430 Programming in C++ 3 cr
PHILSPHY 2540 Science, Technology and Ethics 3 cr

Engineering Science Electives (6 credits):
GENENG 2130 Engineering Mechanics-Statics 3 cr
GENENG 2220 Engineering Mechanics-Dynamics 2 cr
GENENG 2230 Engineering Mechanics-Dynamics 3 cr
GENENG 2340 Mechanics of Materials 4 cr
GENENG 2630 Basic Thermoscience for Engineers 3 cr
MECHNCHL 2630 Thermodynamics 3 cr
ENGRPHYS 3930 Microsystems and Nanotechnology 3 cr

Electrical Engineering Required Courses (28 credits):
ELECTENG 1020 Electrical Engineering Projects and Tools 1 cr
ELECTENG 1210 Circuit Modeling I 3 cr
ELECTENG 2210 Circuit Modeling II 4 cr
ELECTENG 2220 Signals and Systems 4 cr
ELECTENG 3020 Analog Electronics 4 cr
ELECTENG 3140 Electric and Magnetic Fields 4 cr
ELECTENG 3310 Automatic Controls 3 cr
ELECTENG 3300 Controls Laboratory 1 cr
ELECTENG 3770 Logic and Digital Design 4 cr

Electrical Engineering Professional Emphasis Electives (24 credits)

Communications and Electronics Emphasis
ELECTENG 3130 Solid State Electronics Devices 4 cr
ELECTENG 3780 Introduction to Microprocessors 4 cr
ELECTENG 4010 UHF Amplifier Design 1 cr
ELECTENG 4020 UHF Oscillator Design 1 cr
ELECTENG 4050 Advanced Analog Electronic Circuits 4 cr
ELECTENG 4430 Power Electronics and Electrical Machines 4 cr
ELECTENG 4610 Communication Systems 4 cr
ELECTENG 4620 Optical Systems 4 cr
ELECTENG 4630 Advanced Communication Systems 4 cr
ELECTENG 4980 Current Topics in Electrical Engineering 1-4 cr
ELECTENG 4990 Independent Study 1-3 cr

Computers Engineering Emphasis
ELECTENG 3130 Solid State Electronics Devices 4 cr
ELECTENG 3780 Introduction to Microprocessors 4 cr
ELECTENG 4720 Microcomputer Architecture and Interfacing 4 cr
ELECTENG 4750 Advanced Digital Design 4 cr
ELECTENG 4980 Current Topics in Electrical Engineering 1-4 cr
ELECTENG 4990 Independent Study 1-3 cr

Controls Emphasis
ELECTENG 3410 Electric Power Engineering 4 cr
ELECTENG 3780 Introduction to Microprocessors 4 cr
ELECTENG 4310 Modern Control Systems 4 cr
ELECTENG 4320 Digital Signal Processing 4 cr
ELECTENG 4350 Discrete Time Control Systems 4 cr
ELECTENG 4980 Current Topics in Electrical Engineering 1-4 cr
ELECTENG 4990 Independent Study 1-3 cr
# Power and Energy Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTENG 3410</td>
<td>Electric Power Engineering</td>
<td>4 cr</td>
</tr>
<tr>
<td>ELECTENG 3780</td>
<td>Introduction to Microprocessors</td>
<td>4 cr</td>
</tr>
<tr>
<td>ELECTENG 4430</td>
<td>Power Electronics and Electrical Machines</td>
<td>4 cr</td>
</tr>
<tr>
<td>ELECTENG 4440</td>
<td>Electric Motor Drives</td>
<td>4 cr</td>
</tr>
<tr>
<td>ELECTENG 4450</td>
<td>Power Systems Analysis</td>
<td>4 cr</td>
</tr>
<tr>
<td>ELECTENG 4980</td>
<td>Current Topics in Electrical Engineering</td>
<td>1-4 cr</td>
</tr>
<tr>
<td>ELECTENG 4990</td>
<td>Independent Study</td>
<td>1-3 cr</td>
</tr>
</tbody>
</table>
Department of General Engineering

www.uwplatt.edu/geneng

Department Chair: Osama Jadaan
Office: 153 Ottensman Hall
Phone: 608.342.1711
E-mail: jadaan@uwplatt.edu

Professors:
Osama M. Jadaan
Abulkhair M. Masoom

Assistant Professors:
Ali B. Olcay
Hong Teng

Lecturers:
James N. Almquist
Fahmida R. Masoom

Academic Department Associate:
Mary C. Kurth

About the Department and Program

The General Engineering (GE) Program is designed to prepare students for admission into one of seven professional engineering programs available at UW-Platteville. All of the engineering programs are accredited by the Accreditation Board for Engineering and Technology (ABET). All new freshman engineering students and transfer students who do not immediately qualify for a professional program must begin their UW-Platteville studies in the General Engineering Department.

Students admitted to the University must also have a score of 22 or higher on their math ACT or a grade of “C” or better in Calculus I (MATH 2640 or its equivalent) to gain admission into General Engineering. Students who do not meet this engineering standard will remain in “Pre-engineering” until obtaining a “C” or better in Calculus I (MATH 2640).

General Engineering students have varied backgrounds; some are better prepared for their college studies than others. The General Engineering program offers students an opportunity to correct academic deficiencies and ensures that students enter the professional programs with suitable preparation. The General Engineering program also allows students several semesters to finalize their choice of major.

Upon entering the General Engineering Department, each student will be asked to select a preferred professional program (major). The student’s choice at this point is not binding; it will merely provide the college with some information for planning purposes. Students electing to change their program preference may do so at any time by stopping by the General Engineering Office, 153 Ottensman Hall.

In order to gain admission to one of the seven professional programs (civil engineering, electrical engineering, engineering physics, environmental engineering, industrial engineering, mechanical engineering or software engineering), a student must satisfy all requirements of the General Engineering Program, listed in the following.

Because there are limits to the number of students that each professional program can accommodate, admission to the individual professional programs is somewhat competitive. Twice a year, each degree-granting department establishes a minimum Core Grade Point Average (CGPA) required for admission to its program(s) at the end of the semester. Admission to a specific program is based on the program CGPA requirement in effect during the semester in which the student completes the General Engineering requirements. The CGPA requirement for a given program does not reflect the difficulty of that program. The CGPA requirement simply indicates the accumulated level of student demand for that program. A student who completes the General Engineering Core Courses and does not achieve the program’s minimum CGPA criterion may be admitted to that program by the department chair if space is available. Admission will be by rank CGPA.

Educational Goals and Objectives

1. Prepare students for entrance into the professional engineering programs;
2. Smooth the transition from high school to college for new freshman majoring in engineering through proper advising, schedule-building, counseling and monitoring;
3. Assist freshmen and transfer students in career counseling relative to both engineering and non-engineering fields;
4. Recruit and retain high quality high school and transfer students interested in majoring in engineering with special emphasis on attracting women and minorities; and
5. Maintain the high quality of instruction and professional development necessary to ensure the accreditation of the professional programs.
Sample First Semester Course Work

Although courses are tailored to the individual student’s background and major requirements, a typical first semester freshman schedule would be:

- **MATH 2640 Calculus and Analytic Geometry I** 4 cr
- **ENGLISH 1130 Freshman Composition I** 3 cr
- **CHEMSTRY 1450 Chemistry for Engineers** 5 cr
- **GENENG 1000 Introduction to Engineering** 1 cr
- **PHYSED 1000 Fitness Assessment** 1 cr
- **Humanities or Social Science Elective** 3 cr

Total Credits: 14-17

**Effective Fall 2009 General Engineering Program Requirements**

1. Each student must complete the following seven core courses:
   - **CHEMSTRY 1450** Chemistry for Engineers 5 cr
   or
   - **MATH 2730** Discrete Mathematics 3 cr
     (for Software Engineering)
   - **ENGLISH 1130** Freshman Composition 3 cr
   - **GENENG 1000** Engineering Success Skills 1 cr
   - **GENENG 1030** Introduction to Engineering Projects 1 cr
   - **GENENG 1320** Engineering and Computer Graphics 2 cr
     (Electrical Engineering does not require GENENG 1320)
   or
   - **COMPUTER 1430** Programming in C++ 3 cr
     (for Software Engineering)

2. Students who complete their core courses in Fall 2009 must earn the following CGPA to gain entry into their respective professional program:
   - Civil Engineering: 2.70
   - Electrical Engineering: 2.30
   - Engineering Physics: 2.40
   - Environmental Engineering: 2.50
   - Industrial Engineering: 2.20
   - Mechanical Engineering: 2.60
   - Software Engineering: 2.30

A student who completes the GE core courses and does not achieve the program’s minimum CGPA criterion may be admitted to that program by the department chair if space is available. Admission will be by rank CGPA.

3. Each student must earn a grade of “C” or better in MATH 2640 and MATH 2740.

4. Each degree-granting department also designates certain courses as “professional courses” that require a grade of “C” or better. The professional courses for each department are:
   - **Civil Engineering** and Environmental Engineering: Any course that is a prerequisite for a civil or environmental engineering course.
   - **Electrical Engineering**: Any course that is a prerequisite for an electrical engineering course.
   - **Engineering Physics**: All physics or engineering physics courses which are prerequisites for later courses in the major must be completed with a “C” or better. Also, an engineering physics major must have a GPA of 2.00 for all 3000/4000 engineering courses. Only one “D” in engineering physics courses may be counted towards graduation.

   - Industrial Engineering: All required industrial engineering courses must be completed with an overall “C” average.
   - Mechanical Engineering: All courses in mechanical engineering must be completed with an overall “C” average.
   - Software Engineering: All required software engineering, computer science and electrical engineering courses.

**General Engineering Program Limits**

1. Once admitted into General Engineering, a student must successfully complete the General Engineering program requirements before accumulating 60 or more credits at UWP. Each repetition of a given course will be counted toward the 60 credit limit. With the exception of the 7 General Engineering core courses, credits earned at UWP prior to admission to General Engineering will not be counted toward the 60 credit limit.

2. General Engineering students may take no more than 9 credits of engineering courses numbered at the 2000 level or higher.

**Dismissal from Engineering**

Engineering majors who fail to meet the CGPA of their professional program within the 60 credit limit will be dismissed from engineering. Students who are dismissed from the university are also dismissed from engineering and must appeal to both the university and engineering for reinstatement. A student who has been dismissed from engineering may not enroll in any engineering class during the fall or spring semesters. Students may address appeals for reinstatement to the Engineering Admissions and Academic Standards Committee, General Engineering Department, 153 Ottensman Hall.

**Transfer Credits**

1. The transfer of credits into any engineering program must be approved by the appropriate department chair. All transfer of credits must follow the specific requirements of the professional program which the student will be entering, including any specific grade requirement(s).

2. Pass/Fail or “D” grades are generally not transferable into engineering.

3. It is understood that students entering engineering with an Associate of Arts or Science Degree from the UW-Colleges, a four-year UW-System institution or from the Illinois or Highland Community Colleges will have satisfied the General Education requirements for UWP.

4. Students transferring from programs that are not ABET accredited may be required to substantiate their expertise in the topics in question.
# Microsystems and Nanotechnology Minor

UW-Platteville’s minor in Microsystems and Nanotechnology (MS/NT) is designed to prepare students to contribute to this rapidly developing field. In this minor, students build on their knowledge bases in their chosen disciplines (biology, chemistry, electrical engineering, engineering physics, or mechanical engineering). Students are introduced to the basic issues and ideas of Microsystems/Nanotechnology and to the interdisciplinary body of knowledge that allows scientists and engineers from different backgrounds to collaborate at the micro/nano scale. Students also gain training in experimental techniques for micro/nano scale fabrication and characterization, as well as participate in a research project.

The Microsystems/Nanotechnology minor consists of 24 credits, with some of these credits overlapping with several existing programs. By careful selection of elective courses within a student’s major, the student may complete this minor with only 6 credits beyond the number required for graduation.

## Required Courses (9 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGRPHYS 3930</td>
<td>Microsystems and Nanotechnology</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 4520</td>
<td>Nanoscale Characterization and Fabrication</td>
<td>2 cr</td>
</tr>
<tr>
<td>GENENG 4230</td>
<td>Design and Simulation of MEMS</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 4000</td>
<td>Research in Microsystems and Nanotechnology</td>
<td>1-3 cr</td>
</tr>
</tbody>
</table>

## Electives (15 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOLOGY 2040</td>
<td>Cell Biology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3240</td>
<td>Microbiology</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 3330</td>
<td>Genetics</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 3530</td>
<td>Biotechnology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIOLOGY 4040</td>
<td>Molecular Biology</td>
<td>5 cr</td>
</tr>
<tr>
<td>BIOLOGY 3620</td>
<td>Immunology</td>
<td>2 cr</td>
</tr>
<tr>
<td>CHEMSTRY 3540</td>
<td>Organic Chemistry Lecture</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHEMSTRY 4630</td>
<td>General Biochemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 4130</td>
<td>Physical Chemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>ELECTENG 3020</td>
<td>Analog Electronics</td>
<td>4 cr</td>
</tr>
<tr>
<td>ELECTENG 3130</td>
<td>Solid State Electronic Devices</td>
<td>3 cr</td>
</tr>
<tr>
<td>ELECTENG 3310</td>
<td>Automatic Controls</td>
<td>3 cr</td>
</tr>
<tr>
<td>ELECTENG 4050</td>
<td>Advanced Analog Electronic Circuits</td>
<td>4 cr</td>
</tr>
<tr>
<td>ELECTENG 4310</td>
<td>Modern Controls Systems</td>
<td>4 cr</td>
</tr>
<tr>
<td>ELECTENG 3140/3640</td>
<td>Electric and Magnetic Fields</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGRPHYS 3240</td>
<td>Applied Mechanics</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENGRPHYS 4140</td>
<td>Applied Optics</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENGRPHYS 4210</td>
<td>Sensors Laboratory</td>
<td>2 cr</td>
</tr>
<tr>
<td>ENGRPHYS 4220</td>
<td>Applications of Modern Physics</td>
<td>2 cr</td>
</tr>
<tr>
<td>MECHNCHL 3040</td>
<td>Engineering Materials</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 3230</td>
<td>Manufacturing Processes</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 3330</td>
<td>Design of Machine Elements</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4330</td>
<td>Automatic Controls</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4430</td>
<td>Advanced Materials</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4440</td>
<td>Failure of Materials</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4500</td>
<td>Biomedical Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4800</td>
<td>Finite Element Method</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4840</td>
<td>Vibration Systems Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4830</td>
<td>Mechatronics</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHLSPHY 2540</td>
<td>Science, Technology and Ethics</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
About the Department and Major

Welcome to the exciting world of mathematics. Often called the “Queen and Servant of the Sciences,” mathematics has a long history of developing new frontiers and enriching the sciences and engineering. Most recently, mathematics has become increasingly important in such diverse areas as economics, psychology, linguistics, biology, management science and agriculture. Thus, the mathematics major and minor provide a strong and flexible background for a variety of careers.

Students majoring in mathematics must take a core of required courses, while other courses are selected with regard to career goals. Majors who plan to work in business or industry after graduation choose their electives from applied mathematics courses such as differential equations and numerical analysis. Mathematics majors planning to work as an actuary or toward an advanced degree in statistics should include junior-senior level probability and statistics courses among their mathematics electives.

For mathematics majors, many career opportunities are available in teaching, applied mathematics, statistics, computer science, actuarial science and others. Many UW-Platteville alumni with mathematics majors are pursuing careers as secondary school teachers, college teachers, actuaries with insurance companies and financial institutions, statisticians in both government and industry and as computer programmers and software engineers.

Mission

The purpose of the mathematics curriculum is to provide all students with quantitative skills to function proficiently in a societal and professional capacity. In addition to offering majors and minors in mathematics, the Department of Mathematics offers courses to support both the general education requirements of the university and the major and minor programs of other departments. Within this mission, the Department of Mathematics strives to furnish an open, enlightened environment, with frequent student/faculty interaction, resulting in a high quality undergraduate education that will develop and enhance students’ computational and reasoning skills.

Educational Goals and Learning Outcomes

The goals of the mathematics major at UW-Platteville are to:
1. prepare students with the skills needed to pursue careers in education, business and industry;
2. provide a theoretical foundation that will prepare students to continue their study of mathematics or statistics at the graduate level; and
3. provide students with opportunities to experience mathematics outside of their regular course work.

Upon graduation, mathematics majors at UW-Platteville should be able to:
1. communicate mathematics effectively;
2. demonstrate a computational ability in solving a wide array of mathematical problems;
3. differentiate between valid and invalid mathematical reasoning;
4. develop mathematical ideas from basic axioms;
5. utilize mathematics to solve theoretical and applied problems; and
6. identify applications of mathematics in other disciplines and in society.
Placement
Initial placement of students in mathematics courses will be determined by the Department of Mathematics on the basis of scores on the UW-System Mathematics Placement Test or acceptable college transfer credit in mathematics. Advanced placement credit for Calculus and Analytic Geometry is awarded only to students who satisfactorily complete the College Entrance Examination Board (CEEB) Advanced Placement Examination in Calculus. Upon request students will receive: 1) 4 credits for MATH 2640 if they receive a score of 4 or 5 on the CEEB Advanced Placement Calculus AB examination; 2) 3 credits for MATH 2630 if they receive a score of 3 on the CEEB Advanced Placement Calculus AB examination; 3) 8 credits for MATH 2640 and 2740 if they receive a score of 4 or 5 on the CEEB Advanced Placement Calculus BC examination; or 4) 4 credits for Math 2640 if they receive a score of 3 on the CEEB Advanced Placement Calculus BC examination. Credit for MATH 1830 (Elementary Statistics) is awarded to students having received a score of 3, 4 or 5 on the CEEB Advanced Placement Statistics examination.

Students taking sequential courses in mathematics must attain a grade of “C” or better before taking the succeeding course.

Calculator Policies
Many of the courses in the department require calculators. However, there are some restrictions as to what specific types of calculators may or may not be used in specific courses. Please go to the department website at www.uwplatt.edu/math to find a link to the current calculator policies.

General Requirements
Bachelor of Science Degree
Total for Graduation .......................... 120 credits
General Education ................................ 44-58 credits
Major Studies .................................... 36 credits
Mathematics Major ............................. 36 credits
or
Mathematics Major in Secondary Education .......................... 36 credits

A grade of “C” or better is required in all mathematics courses counted toward degree requirements.

Mathematics Major (36 credits) or Mathematics Major in Secondary Education (36 credits)

Core Requirements
Mathematics majors or mathematics majors in secondary education are required to complete all of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2640</td>
<td>Calculus and Analytic Geometry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2740</td>
<td>Calculus and Analytic Geometry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2840</td>
<td>Calculus and Analytic Geometry III</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 3230</td>
<td>Linear Algebra</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 3330</td>
<td>Modern Algebra</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 4030</td>
<td>Statistical Methods with Applications</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 4430</td>
<td>Advanced Calculus</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 4810</td>
<td>Senior Seminar</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

In-Depth Experience Requirement
(For Mathematics Majors Only)
Mathematics majors are required to complete a more thorough study of a particular area of mathematics. This requirement may be satisfied by one of the following courses: MATH 3830 Differential Equations II, MATH 4040 Statistics and Probability, or MATH 4530 Complex Variables.

Geometry and Teaching Methods Requirements
(For Mathematics Majors in Secondary Education Only)
Students seeking teaching certification in mathematics are required to complete MATH 3130 College Geometry and MATH 3020 Teaching of Mathematics in the Middle and Secondary School. MATH 3020 does not count in the 36 credit hour requirement for the major.

Mathematics Electives
In addition to the requirements described above, all mathematics majors or mathematics majors in secondary education must complete at least 8 additional credits in mathematics. Courses numbered below 2640 or between 3000 and 3100 may not be counted toward this requirement. Students who are also majoring in one of the engineering areas may count up to 6 credits of selected engineering courses (CIVILENG 3100, CIVILENG 3300, ELECTENG 3140, ELECTENG 4310, ENGRPHYS 3240, ENGRPHYS 3640, INDS 3530, MECHNCHL 3030, MECHNCHL 3300 and MECHNCHL 3640) as mathematics electives.

Computer Science Requirement
All mathematics majors or mathematics majors in secondary education are required to demonstrate proficiency in a high level computer language such as FORTRAN, Pascal, C or C++. Students who complete COMPUTER 1130 Introduction to Programming or COMPUTER 1430 Programming in C++ will have satisfied this requirement.

Natural Science Requirement
All mathematics majors or mathematics majors in secondary education must successfully complete one of the following courses in chemistry or physics:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMSTRY 1140</td>
<td>General Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>or</td>
<td>CHEMSTRY 1450</td>
<td>Chemistry for Engineers</td>
</tr>
<tr>
<td>PHYSICS 2240</td>
<td>General Physics I</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

Actuarial Science Emphasis (60 credits)
Students completing this emphasis must complete all the requirements for the 36 credit mathematics major, including MATH 4040 Probability and Statistics, and the following other requirements.

Required Business and Related Courses (24 Credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTING 2010</td>
<td>Financial Accounting I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACCTING 2020</td>
<td>Management Accounting II</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 1200</td>
<td>Introduction to American</td>
<td>3 cr</td>
</tr>
<tr>
<td></td>
<td>Business Enterprise</td>
<td></td>
</tr>
</tbody>
</table>
In addition to these required courses, students majoring in this emphasis should consider the following courses:

**BUSADMIN 4030 Financial Decision Making** 3 cr

**Finance Emphasis (60 credits)**

Students completing this emphasis must complete all the requirements for the 36 credit mathematics major, including MATH 4040 Probability and Statistics, and the following other requirements.

**Required Business and Accounting Courses:**
- **ACCTING 2010 Financial Accounting I** 3 cr
- **ACCTING 2020 Management Accounting II** 3 cr
- **BUSADMIN 3430 Risk Management** 3 cr
- **BUSADMIN 3620 Financial Management** 3 cr
- **BUSADMIN 3930 Investments** 3 cr
- **BUSADMIN 4030 Financial Decision Making** 3 cr

In addition to these required courses, students majoring in this emphasis should consider the following courses:

**BUSADMIN 3400 Personal Financial Planning** 3 cr
- **ECONOMIC 2130 Macroeconomics** 3 cr
- **ECONOMIC 2230 Microeconomics** 3 cr
- **MATH 1730 Mathematics of Finance** 3 cr

**Mathematics Minor (24 credits)**

Mathematics minors must earn a minimum of 24 credits in mathematics subject to the restrictions outlined below. Credit for courses numbered below 2640 or between 3000 and 3100 may not be included in this total. The courses selected to satisfy this requirement must include:

**Required Courses:**
- **MATH 2640 Calculus and Analytic Geometry I** 4 cr
- **MATH 2740 Calculus and Analytic Geometry II** 4 cr
- **MATH 2840 Calculus and Analytic Geometry III** 4 cr
- **MATH 3130 College Geometry** 3 cr
- **MATH 3230 Linear Algebra** 3 cr
- **MATH 3330 Modern Algebra** 3 cr
- **MATH 4030 Statistical Methods with Applications** 3 cr

In addition to these requirements, all mathematics minors in secondary education must successfully complete MATH 3020 Teaching of Mathematics in the Middle and Secondary School, either COMPUTER 1130 Introduction to Programming or COMPUTER 1430 Programming in C++ (or equivalent), and either CHEMISTRY 1140 (or CHEMISTRY 1450) General Chemistry or PHYSICS 2240 General Physics I.

**Mathematics Minor for Middle School Teachers (24 credits)**

(Intended for students who are majoring in elementary and middle level education. Other students should contact the Mathematics Department for details.)

Mathematics minors for middle school teachers must earn a minimum of 24 credits in mathematics by completing all of the following:

**Required Courses:**
- **MATH 1030 Mathematics for Educators I** 3 cr
- **MATH 2030 Mathematics for Educators II** 3 cr
- **MATH 3030 Mathematics for Educators III** 3 cr
- **MATH 1830 Elementary Statistics** 3 cr
- **MATH 2450 Precalculus** 5 cr
- **MATH 2630 Calculus with Applications** 3 cr
- **MATH 3040 Mathematics Seminar for Middle School Teachers** 4 cr

Students may substitute MATH 1530 College Algebra and MATH 2530 Trigonometry and Analytic Geometry for MATH 2450 Precalculus. Students may substitute MATH 2640 Calculus and Analytic Geometry I for MATH 2630 Calculus with Applications.
Department Chair: David N. Kunz  
Office: 040 Ottensman Hall  
Phone: 608.342.1431  
Fax: 608.342.1566  
E-mail: kunzd@uwplatt.edu

Majors
Industrial Engineering  
Production Emphasis
Management Emphasis
Mechanical Engineering

About the Department and Majors

The Department of Mechanical and Industrial Engineering offers two Bachelor of Science degrees: Mechanical Engineering and Industrial Engineering. The two disciplines have complementary aspects and provide opportunities for close cooperation between them. The department’s mission is to provide an open, student-friendly environment with frequent student-faculty interaction that results in a high quality undergraduate mechanical or industrial engineering education and enables graduates to practice their profession with proficiency and integrity.

Industrial Engineering

Contact: Justin Kile, Program Coordinator  
Office: 28 Ottensman Hall  
Phone: 608.342.1675  
E-mail: kilej@uwplatt.edu

Professors:  
Swaminathan Balachandran  
Jill M. Clough

Associate Professor:  
Patricia Jinkins

Assistant Professor:  
Justin Kile

Academic Department Associate:  
Joyce Clifton

Industrial Engineering is concerned with the design, improvement and installation of integrated systems of people, materials and technology. Industrial engineers combine a knowledge of mathematics, physical sciences and social sciences with the principles and methods of engineering analysis and design. At one time, industrial engineers were employed mainly in manufacturing. Today, however, they are employed by both manufacturing and service industries, which has increased the demand for industrial engineers. Industrial engineers are generalists rather than specialists. Therefore, the industrial engineering curriculum at UW-Platteville covers a broad range of topics related to engineering practice. It includes study in engineering science topics as well as in each major specialty within industrial engineering. In addition, students are required to fulfill general university requirements in the humanities, physical sciences, social sciences and other areas. The main purpose of the industrial engineering curriculum is to prepare new engineers to practice at the frontiers of engineering knowledge and professional practice immediately after graduation.

Educational Objectives and Outcomes

Objectives: The educational objectives of the Industrial Engineering Program, as measured within five years of graduation, are listed below.
1. Graduates successfully apply technical knowledge to solve industrial engineering problems.
2. Graduates communicate effectively orally and in writing.
3. Graduates pursue professional growth.

Outcomes: At the time of graduation, students have achieved the following outcomes of the Industrial Engineering Program:
1. An ability to apply knowledge of mathematics, science and engineering.
2. An ability to design and conduct experiments as well as to analyze and interpret data.
3. An ability to design a system or process to meet specified requirements.
4. An ability to work as part of a multidisciplinary team.
5. An ability to identify, formulate and solve industrial engineering problems.
6. An understanding of professional and ethical responsibility.
7. An ability to effectively and accurately present information orally, and effectively and accurately communicate in writing.
8. An understanding of the impact of industrial engineering solutions in a global, economic, environmental and societal context.
9. An ability to pursue professional growth through lifelong learning activities, a knowledge of contemporary issues and ability to use techniques, skills and modern engineering tools necessary for engineering practice.

### General Requirements

#### Bachelor of Science Degree

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for Graduation</td>
<td>126 credits</td>
</tr>
<tr>
<td>Major Studies</td>
<td>95 credits</td>
</tr>
</tbody>
</table>

### Industrial Engineering Major

**95 credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2640</td>
<td>Calculus and Analytic Geometry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2740</td>
<td>Calculus and Analytic Geometry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2840</td>
<td>Calculus and Analytic Geometry III</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 4030</td>
<td>Statistical Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 1450</td>
<td>Chemistry for Engineers</td>
<td>5 cr</td>
</tr>
<tr>
<td>PHYSICS 2240</td>
<td>General Physics I</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 2340</td>
<td>General Physics II</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIOLOGY 2340</td>
<td>Essentials of Anatomy and Physiology</td>
<td>4 cr</td>
</tr>
<tr>
<td>GENENG 1000</td>
<td>Engineering Success Skills</td>
<td>1 cr</td>
</tr>
<tr>
<td>GENENG 1030</td>
<td>Introduction to Engineering Projects</td>
<td>1 cr</td>
</tr>
<tr>
<td>GENENG 1320</td>
<td>Engineering/Computer Graphics</td>
<td>2 cr</td>
</tr>
<tr>
<td>GENENG 2130</td>
<td>Engineering Mechanics - Statics</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 2220</td>
<td>Engineering Mechanics - Dynamics</td>
<td>2 cr</td>
</tr>
<tr>
<td>GENENG 2340</td>
<td>Mechanics of Materials</td>
<td>4 cr</td>
</tr>
<tr>
<td>GENENG 2630</td>
<td>Basic Thermoscience</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 2820</td>
<td>Engineering Economy</td>
<td>2 cr</td>
</tr>
<tr>
<td>GENENG 2930</td>
<td>Applications of Electrical Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 2130</td>
<td>Fundamentals of Industrial and Systems Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 3430</td>
<td>Human Factors Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 3530</td>
<td>Operations Research I</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 3630</td>
<td>Work Measurement and Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4030</td>
<td>Production and Operations Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4230</td>
<td>Facilities Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4430</td>
<td>Quality Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4730</td>
<td>Engineering Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4930</td>
<td>Industrial Systems Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4430</td>
<td>Advanced Materials</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Production Emphasis

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECHNCHL 3230</td>
<td>Manufacturing Processes</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4630</td>
<td>Manufacturing Systems Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4830</td>
<td>Engineering Continuous Improvement</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

#### At least 6 credits from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDSTENG 4130</td>
<td>Simulation</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4330</td>
<td>Material Handling and Warehousing</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4780</td>
<td>Principles and Design of Engineering MIS</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4830</td>
<td>Engineering Continuous Improvement</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4430</td>
<td>Advanced Materials</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Engineering Management Emphasis

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDSTENG 4750</td>
<td>Principles and Application of Project Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4830</td>
<td>Engineering Continuous Improvement</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

#### At least 6 credits from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDSTENG 4130</td>
<td>Simulation</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4330</td>
<td>Material Handling and Warehousing</td>
<td>3 cr</td>
</tr>
<tr>
<td>INDSTENG 4780</td>
<td>Principles and Design of Engineering Management Info. Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 3030</td>
<td>Human Resources Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 3230</td>
<td>Small Business Management</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Industrial Engineering Technical Electives

Each student must complete one of the following areas with a minimum of 12 credits.
Mechanical engineers meet the needs of society in many important ways including the creative planning, development and operation of mechanical systems for using energy, machines and resources; the use and commercial conversion of energy to provide heat, cooling, transportation and power; the design and production of labor-saving machines; and the processing of materials into useful products.

Mechanical engineers serve such diverse areas as energy, mechanical systems, robotics, automation, environment, transportation, heating and cooling systems, bioengineering, manufacturing systems and electronics. Mechanical engineering is an exciting and challenging profession for women and men.

The main purpose of the mechanical engineering curriculum is to develop in each student a thorough understanding of fundamental theory, augmented and illustrated by practical application. It provides a balance between engineering science and engineering design, complemented with a strong liberal arts education. The faculty members are dedicated to providing students with personal attention needed for maximum development of skills.

Educational Goals and Objectives

1. Graduate proficient mechanical engineers with a strong background in the technical areas.
   a. Ability to apply mathematics and basic sciences to solve practical problems.
   b. Solid background in engineering sciences and design.
   c. Solid background in computer tools and methods.
   d. Solid background in experimental methods.
   e. Sufficient flexibility in curriculum so that students may pursue individual interests.

2. Graduate mechanical engineers with strong professional skills.
   a. Communication skills including oral, written and graphical.
   b. Team working skills.
   c. Awareness of and ability to effectively deal with a wide range of societal issues, such as aesthetic, economic, environmental, legal and social, that shape engineering decision making.
   d. Familiarity with the design process in a broad sense, including project planning, project management and implementation.

3. Graduate engineers who understand the need for and have the capability and motivation to pursue continual professional development.
   a. Ability to keep up to date with current engineering practices, procedures and tools.
   b. Ability to successfully pursue graduate or professional study.

4. Graduate engineers who are familiar with ethics and professionalism.
   a. Understanding of ethical principles and typical dilemmas faced by practicing engineers.
   b. Familiarity with the laws pertaining to the professional practice of engineering and the responsibilities of engineers.

5. Graduate engineers with a well-rounded education to become quality citizens.
   a. Solid liberal arts and social science background to develop connections between engineering and social and humanistic issues.
   b. Support a variety of activities to enhance and broaden the students' opportunities technically and socially.

General Requirements

Bachelor of Science Degree

Total for Graduation.....................................................131 credits
Major Studies .............................................................100 credits
# Mechanical Engineering Major

(100 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2640</td>
<td>Calculus and Analytic Geometry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2740</td>
<td>Calculus and Analytic Geometry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 2840</td>
<td>Calculus and Analytic Geometry III</td>
<td>4 cr</td>
</tr>
<tr>
<td>MATH 3630</td>
<td>Differential Equations</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 3230</td>
<td>Linear Algebra</td>
<td>3 cr</td>
</tr>
<tr>
<td>or MATH 4030</td>
<td>Statistical Methods with Applications</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHEMSTRY 1450</td>
<td>Chemistry for Engineers</td>
<td>5 cr</td>
</tr>
<tr>
<td>PHYSICS 2240</td>
<td>General Physics I</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 2340</td>
<td>General Physics II</td>
<td>4 cr</td>
</tr>
<tr>
<td>PHYSICS 2410</td>
<td>Physics of Sound</td>
<td>1 cr</td>
</tr>
<tr>
<td>GENENG 1000</td>
<td>Engineering Success Skills</td>
<td>1 cr</td>
</tr>
<tr>
<td>GENENG 1030</td>
<td>Introduction to Engineering Projects</td>
<td>1 cr</td>
</tr>
<tr>
<td>GENENG 1320</td>
<td>Engineering Computer Graphics</td>
<td>2 cr</td>
</tr>
<tr>
<td>GENENG 2820</td>
<td>Engineering Economy</td>
<td>2 cr</td>
</tr>
<tr>
<td>GENENG 2130</td>
<td>Engineering Mechanics - Statics</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 2230</td>
<td>Engineering Mechanics - Dynamics</td>
<td>3 cr</td>
</tr>
<tr>
<td>GENENG 2340</td>
<td>Mechanics of Materials</td>
<td>4 cr</td>
</tr>
<tr>
<td>GENENG 2930</td>
<td>Applications of Electrical Engineering</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECHNCHL 2630</td>
<td>Thermodynamics</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 3030</td>
<td>Dynamical Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 3040</td>
<td>Engineering Materials</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 3230</td>
<td>Manufacturing Processes</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECHNCHL 3300</td>
<td>Fluid Dynamics</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 3330</td>
<td>Design of Machine Elements</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 3630</td>
<td>Applied Thermodynamics</td>
<td>2 cr</td>
</tr>
<tr>
<td>MECHNCHL 3640</td>
<td>Heat Transfer</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 3720</td>
<td>Mechanical Systems Lab</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 3730</td>
<td>Mechanical Systems Design</td>
<td>2 cr</td>
</tr>
<tr>
<td>MECHNCHL 3830</td>
<td>Mechanisms and Machines</td>
<td>2 cr</td>
</tr>
<tr>
<td>MECHNCHL 4310</td>
<td>Controls Laboratory</td>
<td>1 cr</td>
</tr>
<tr>
<td>MECHNCHL 4320</td>
<td>Automatic Controls</td>
<td>2 cr</td>
</tr>
<tr>
<td>MECHNCHL 4720</td>
<td>Thermal Systems Lab</td>
<td>2 cr</td>
</tr>
<tr>
<td>MECHNCHL 4730</td>
<td>Thermo-Fluid Systems Design</td>
<td>2 cr</td>
</tr>
<tr>
<td>MECHNCHL 4930</td>
<td>Senior Design Project</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Technical Electives (9 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTENG 4310</td>
<td>Modern Control Systems</td>
<td>4 cr</td>
</tr>
<tr>
<td>INDSTENG 4430</td>
<td>Quality Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4430</td>
<td>Advanced Materials</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4440</td>
<td>Failure of Materials</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4500</td>
<td>Biomedical Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4520</td>
<td>Power Plant Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4550</td>
<td>Heat Transfer Applications</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4600</td>
<td>Energy Systems Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4630</td>
<td>Internal Combustion Engine Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4640</td>
<td>Mechanical Design of Internal Combustion Engines</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECHNCHL 4650</td>
<td>Environmental Control Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4750</td>
<td>Computational Methods in Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4800</td>
<td>Finite Element Method</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4830</td>
<td>Mechatronics</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4840</td>
<td>Vibration System Design</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4850</td>
<td>Computer-Aided Engineering</td>
<td>3 cr</td>
</tr>
<tr>
<td>MECHNCHL 4980</td>
<td>Current Topics in Engineering</td>
<td>1-3 cr</td>
</tr>
</tbody>
</table>
The mission of the College of Liberal Arts and Education is to provide a broad foundation of knowledge for all students, fostering an appreciation of the complexity of human nature and the diversity of human experience. The college accomplishes this in two ways: by providing liberal studies courses that form the foundation of a university education, and by offering a variety of major and minor programs which may be used as a basis for career development. Liberal education courses foster development of flexible, critical, reflective and divergent thinking. They form the foundation for lifelong learning and global citizenship preparing students not only for their chosen careers but for multiple facets of their lives. Liberal studies courses also develop skills in oral and written communication.

The college provides in-depth study in the liberal arts as well as programs leading to certification to teach. Licensure may be obtained in a major, a comprehensive major and/or minor.

A well-qualified faculty, who view their principal responsibility as teaching, take pride in advancing their majors in liberal arts and professional programs and engaging in productive interactions with the community at large.

International Exchange Program and Mississippi Valley State University Partnership

Students are strongly encouraged to take advantage of opportunities for international and intercultural experiences to broaden their horizons, increase their understanding of others and prepare to live in the global community. UWP makes every effort to create these opportunities so that students do not lose any time toward graduation or incur significant additional expense.

Many courses required for general education can be fulfilled through UW-Platteville’s Study Abroad Programs in England, France, Germany, Ireland, Mexico, Spain, Italy, China, Australia and Fiji. In addition, students may take major course work in Education through one-to-one student exchange programs in Stavanger, Norway or in Windesheim, the Netherlands. These one-to-one exchange programs allow UWP students to pay tuition and fees locally while attending classes abroad. Therefore, the only additional costs incurred are for travel and incidental expenses.

Closer to home, students may participate in Winterim coursework, short trips, student teaching assignments or semester exchanges with our partner institution, Mississippi Valley State University, in Itta Bena, Mississippi. Located in the Mississippi Delta, an area rich in culture, music and civil rights history, “the Valley” provides an excellent opportunity for students to experience a different region, climate and culture while taking courses to fulfill their degrees.

Applied Learning

The College of Liberal Arts and Education offers modern classroom, computer, and laboratory facilities. State-of-the-art multimedia lecture rooms are used by our faculty, and many departments have departmental computer labs which facilitate interactive learning. The Williams Fieldhouse provides up-to-date facilities for health and physical education programs, and the Center for the Arts includes a 550-seat concert hall with excellent acoustics, a 340-seat theater, rehearsal halls, faculty studios and numerous practice rooms.

Internships and Co-ops

Many programs within the college afford students the opportunity to pursue work experiences. Students can use their classroom knowledge to solve “real world” problems under the careful guidance of mentors and the supervision of university faculty members.
Partnerships with Local Schools and Educational Agencies

Regional and area preschool, elementary, middle and high schools serve as laboratories for field experiences related to professional teaching. The college utilizes the Children’s Center located on campus as an observation and clinical facility to prepare students for its early childhood methods classes.

The Education Office of Special Programs (EOSP) provides administrative support to many teacher education programs and, in particular the cross-categorical special education and English language learner programs that lead to licensure by the Wisconsin Department of Public Instruction. The office also makes available for purchase or check-out educational resources for middle level educators. These resources were compiled during the many years that UWP housed the Center of Education for the Young Adolescent (CEYA) and hosted the summer seminar, Teaching the Transcendent. Seminars offered by the university today revolve around topics of interest identified by teachers of all levels in their professional development plans. EOSP is located in 134 Doudna Hall. More information can be obtained by calling 608.342.1276 or 1.800.208.7041.

LAE Policies and Procedures

Students enrolled in the College of Liberal Arts and Education may earn either a Bachelor of Arts (B.A.) or a Bachelor of Science (B.S.) degree. The college offers both of these degrees in most programs. A degree program consists of three parts: 1) liberal education requirements, 2) major requirements and 3) minor requirements and/or electives. The liberal education component has been established to provide all students, regardless of major, with a solid foundation for lifetime learning that is essential for successful personal and professional development. Since the liberal education requirements are also intended to aid students in advanced college studies, they should be completed during the freshman and sophomore years.

In addition to the liberal education component, each degree candidate must complete a major offered in the College of Liberal Arts and Education. A typical major program requires 36 credits. Comprehensive majors require 60 or more credits. A minor (usually 24 credits) or second major (within or outside the College of Liberal Arts and Education) is optional. In teacher education, students are required to have an approved comprehensive major, an approved major and minor, or two approved majors.

The College of Liberal Arts and Education has added the following stipulations to its degree programs:

1. Except for education majors, no student may count more than 48 credits from any one discipline toward the 120 credits required for graduation.
2. To earn a major, minor or certificate in the College of Liberal Arts and Education, a student must have a minimum GPA of 2.00 in all courses taken for the major and the minor or certificate program. Individual departments within the college may establish higher requirements than the minimum set by the university or college for majors, minors and/or certificates.
3. Each department and program in the College of Liberal Arts and Education has established a writing certification requirement for its majors. This writing requirement must be completed before graduation can take place. Details on the writing requirement along with other major requirements are available at department offices.
Mission Statement

The faculty of the Department of Criminal Justice recognizes its mission as three-fold. First and foremost, the department is dedicated to providing its majors with the best possible education in criminal justice by providing them with a critical understanding of the total system of criminal justice and the society in which it functions. At the same time, as part of the College of Liberal Arts and Education, we are committed to preparing our students to move successfully into criminal justice careers or post-graduate work as liberally educated, intellectually mature, ethically aware and culturally sensitive men and women.

Second, the Department is dedicated to providing students throughout the university with opportunities to examine critically the broad questions of how justice is administered in American society and to confront firsthand the fundamental issues of criminal justice which they will face as involved citizens.

Finally, the Department of Criminal Justice is dedicated to providing the expertise of its faculty as a resource to assist criminal justice and social service agencies in the realms of applied research, policy development, training and planned change to meet the social and technological challenges of the twenty-first century.

Objectives

Educational Outcomes/Learning Objectives:

Graduates of the Criminal Justice program should:
1. exhibit an understanding of fundamental concepts related to the interrelationship of various components within the criminal justice system (i.e. law enforcement, courts and corrections).
2. apply criminological theories in explaining criminal behavior and the criminal justice process.
3. demonstrate their ability to formulate a problem/topic, assemble relevant research and resources and synthesize the data in a manner to constitute a formal proposal or research paper.
4. analyze and evaluate social, cultural and technological change and its impact on the criminal justice system.
5. understand, analyze and critically evaluate social research.
6. display a working knowledge of qualitative and quantitative research methods.
7. demonstrate in-depth knowledge of substantive areas within the discipline of criminal justice.
8. apply their knowledge toward further study and careers.

About the Department and Major

The major in criminal justice provides a basic understanding of the criminal justice system and the society in which it functions. The first 60 credits are composed primarily of general education courses to develop a broad educational background, along with the first three core criminal justice courses. After completion of 60 credits, in-depth knowledge can be obtained by careful selection of courses in policing, corrections, criminological theory, law, forensic investigation, AODA counseling and private security.

The Criminal Justice Department has received national recognition for the superior quality of its internship program. As a result, participation in the internship program is competitive. The Criminal Justice Department reserves the right to refuse a student an internship if the department decides that the student is not a suitable candidate on the basis of scholarship, verbal ability or character. To be eligible for internship, the student must have earned at least 60 credits plus 12 upper division criminal justice credits, a 2.25 GPA, and a passing score on the department's writing certification requirement.

The Departments of Chemistry and Engineering Physics, Biology and Criminal Justice cooperate in preparing students interested in becoming crime laboratory analysts.

In cooperation with the Department of Psychology and the Counselor Education Graduate Program, undergraduate criminal justice majors can obtain AODA (alcohol and other drug abuse) certification.

The Departments of Criminal Justice and Psychology also cooperate in the social work certification process.

General Requirements

Bachelor of Science Degree

Total for Graduation.....................................................120 credits
General Education.....................................................44-58 credits
Major Studies ............................................................36-54 credits
Bachelor of Science supplement........................................6 credits

Bachelor of Arts Degree

Total for Graduation.....................................................120 credits
General Education.....................................................44-58 credits
Major Studies ............................................................36-54 credits
Bachelor of Arts supplement..........................................4-6 credits
Bachelor of Science Supplement

Required courses (6 credits, 3 credits per discipline):
- ENGLISH 3000 Technical Writing 3 cr
- COMPUTER 1830 Microcomputer Applications 3 cr
- SPEECH 2250 Communication and Leadership in Small Groups 3 cr
- SPEECH 3250 Interpersonal Communication 3 cr
- SPEECH 3500 Persuasion and Argumentation 3 cr
- BUSADMIN 2330 Leadership and Management 3 cr
- CRIMLJUS 3120 Investigative Photography 3 cr

Bachelor of Arts Supplement

Students must choose one of two options.

OPTION ONE (6 CREDITS)

Required courses (6 credits, 3 credits per discipline):
- PHLSPHY 2330 Origins of Western Philosophy 3 cr
- PHLSPHY 2430 Philosophy in the Modern world 3 cr
- PHLSPHY 2530 Ethics 3 cr
- PHLSPHY 3430 Social Philosophy 3 cr
- PHLSPHY 3630 Philosophy of Law 3 cr
- ENGLISH 2430 American Literature through the Civil War 3 cr
- ENGLISH 2530 American Literature since the Civil War 3 cr
- ENGLISH ### Any English course from 3140 through 3760 3 cr
- HISTORY ### Any History course from 3120 through 3430 3 cr

OPTION TWO (4 CREDITS)

Required courses (4 credits):
- FRENCH 2040 Intermediate French 4 cr
- GERMAN 2240 Intermediate German 4 cr
- SPANISH 2840 Intermediate Spanish 4 cr

Criminal Justice Major

(36-54 credits)

Required Courses:
- CRIMLJUS 1130 Introduction to Criminal Justice 3 cr
- CRIMLJUS 2130 The Police Function 3 cr
- CRIMLJUS 2230 Correctional Philosophy 3 cr
- CRIMLJUS 4030 Criminal Law 3 cr
- CRIMLJUS 4930 Criminal Justice Seminar 3 cr
- Electives in Criminal Justice 21 cr
- Total 36 cr

In addition, all criminal justice majors:
1. must complete 3 credits of course work on the nature and causes of criminal and delinquent behavior, which can be fulfilled by successful completion of CRIMLJUS 3430 Patterns of Criminal and Delinquent Behavior, CRIMLJUS 3630 Juvenile Justice, PSYCH 4830 Psychology and the Law or SOCIOLOGY 3330 Crime and Delinquency.
2. must complete 3 credits of course work in research methods, which can be fulfilled by successful completion of either CRIMLJUS 3900 Research Methods in Criminal Justice or SOCIOLOGY 3430 Social Research.
3. must earn a “C” or better in each core course before going on to the next.

In addition, each major must earn a “C” or better in ENGLISH 1130 and ENGLISH 1230 and pass the departmental writing proficiency exam before taking upper division criminal justice courses.

In addition to the social science requirements of the university, all criminal justice majors must either complete at least 6 credits each in psychology, sociology and political science; or complete a minor or second major in any discipline.

Minors to consider include foreign languages, accounting for federal law enforcement or psychology for corrections. Computer science, political science, chemistry, biology and business administration are also excellent minors for students majoring in criminal justice.

Criminal Justice Emphases

Emphases within the major. Students may select one of the three emphases within the criminal justice major. Students are not required to select an emphasis. Students who do not want an emphasis may select 15 to 21 credits of electives from criminal justice courses.

Law Enforcement Emphasis (15 credits)

Required courses:
- CRIMLJUS 2930 Interviewing 3 cr
- CRIMLJUS 3130 Criminal Investigations 3 cr
- CRIMLJUS 4130 Police Community Relations 3 cr

Electives (4-6 credits):
- CRIMLJUS 3330 Police Administration 3 cr
- CRIMLJUS 4330 Procedure and Evidence 3 cr
- CRIMLJUS 4630 Current Topics 1-3 cr

Corrections Emphasis (15 credits)

Required courses:
- CRIMLJUS 3530 Correctional Institutions 3 cr
- CRIMLJUS 3630 Juvenile Justice 3 cr
- CRIMLJUS 4230 Community-Based Corrections 3 cr

Electives (4-6 credits):
- CRIMLJUS 2930 Interviewing 3 cr
- CRIMLJUS 3930 Law of Corrections 3 cr
- CRIMLJUS 4630 Current Topics 1-3 cr

Forensic Investigations Emphasis (15-16 credits)

Required Courses:
- CRIMLJUS 1330 Introduction to Crime Scene Investigation 3 cr
- CRIMLJUS 2520 Crime Scene Processing 3 cr
- CRIMLJUS 3140 Criminalistics 4 cr

Electives (4-6 credits):
- CRIMLJUS 2320 Fingerprinting 3 cr
- CRIMLJUS 2420 Evidence Collection 3 cr
- CRIMLJUS 4630 Current Topics 1-3 cr
Criminal Justice Minor (24 credits)

**Required Courses:**
- CRIMLJUS  1130  Introduction to Criminal Justice  3 cr
- CRIMLJUS  2130  The Police Function  3 cr
- CRIMLJUS  2230  Correctional Philosophy  3 cr
- CRIMLJUS  4030  Criminal Law  3 cr
- Electives in Criminal Justice:  12 cr
- Total:  24 cr

Forensic Investigations Minor
(25 credits)

This minor is not open to criminal justice majors.

The minor in forensic investigation provides a basic understanding of the role and procedures used by crime scene technicians at a crime scene. Emphasis is placed on the collection, analysis, documentation and preservation of crime scene evidence.

**Required Courses:**
- CRIMLJUS  1130  Introduction to Criminal Justice  3 cr
- CRIMLJUS  1330  Introduction to Crime Scene Investigation  3 cr
- CRIMLJUS  2320  Fingerprint Classification and Development  3 cr
- CRIMLJUS  2420  Evidence Collection and Development  3 cr
- CRIMLJUS  2520  Crime Scene Processing Techniques  3 cr
- CRIMLJUS  3120  Investigative Photography  3 cr
- CRIMLJUS  3130  Criminal Investigation  3 cr
- CRIMLJUS  3140  Criminalistics  4 cr
About the Ethnic Studies Program and Minor

The Ethnic Studies Program Council includes Carl Allsup, Ethnic Studies; Rosalyn Broussard, Social Sciences; Teresa Burns, Humanities; Rea Kirk, Education; Joe Lomax, Criminal Justice; Laura Wendorff, Humanities; Carl Wesley, Multicultural Educational Resource Center; Carlos Wiley, Multicultural Educational Resource Center; Laura Beadling, Humanities; and Melissa Gormley, Social Sciences.

The Ethnic Studies Program is dedicated to awakening the minds and spirits of students and others to the issues of race and ethnicity in the United States and the social realities and moral challenges of racism in U.S. culture. It strives to help students fulfill their intellectual, moral and social potential, and encourages them to remove barriers which can prevent others from achieving their potential. It promotes the study of race and ethnicity in historical, social and political structures, and supports and encourages the integration of the vast new scholarship which questions, analyzes and narrates the role of race and ethnicity in the United States.

The Ethnic Studies Program oversees the UWP curriculum requirement that every student in a degree program complete a 3 credit course on issues of race and ethnicity.

Certificate in Ethnic Studies (15 credits)

**Required courses:**
- ETHNSTDY 1030 Race, Gender and Class in the U.S. 3 cr
  or
- ETHNSTDY 2200 Introduction to Ethnic Studies 3 cr

**Electives (12 credits):**
- ETHNSTDY 2130 The Native American Experience 3 cr
- ETHNSTDY 2230 Black Experience in the U.S. 3 cr
- ETHNSTDY 2730 Ethnic Art in the United States 3 cr
- ETHNSTDY 2830 Ethnicity, Race and Crime 3 cr
- ETHNSTDY 2930 Minority Women Writers of the U.S. 3 cr
- ETHNSTDY 2940 The Political Economy of Race, Gender and Ethnicity 3 cr
- ETHNSTDY 3010 Race, Gender and U.S. Labor History 3 cr
- ETHNSTDY 3230 Human Relations 3 cr
- ETHNSTDY 3240 African-American History: 1619 to Present 3 cr
- BUSADMIN 3340 Management, Gender and Race 3 cr
- ETHNSTDY 3410 Chicano Literature 3 cr
- ETHNSTDY 3630 Ethnic and Gender Equity in Education 3 cr
- ETHNSTDY 3720 Ethnic Rights and Politics 3 cr
ART
www.uwplatt.edu/finearts/artmain.htm

Department Chair: G. Daniel Fairchild
Office: 180 Doudna Hall
Phone: 608.342.1143
E-mail: fairchig@uwplatt.edu

Art

Professors:
Steve Vance
Kaye S. Winder

Assistant Professor:
Linda James

Senior Lecturer:
Richard Moninski

Lecturers:
Bruce Howdle
Gregory Nelson

About the Department and Major

Programs of study are offered in art, art education or graphic design, each leading to a bachelor of arts or a bachelor of science degree in the College of Liberal Arts and Education. Students seeking a B-21 certification in art education take the comprehensive art emphasis. Art education majors must complete the College of Liberal Arts and Education general requirements, the School of Education proficiency requirements and the requirements of the basic art emphasis.

Each of the emphases within the art program has a particular goal. The emphasis in graphic design is intended to prepare students for careers in the commercial areas of art. The emphasis in art education prepares students to teach on the elementary, middle and high school levels. The art emphasis has a more general goal. It can be used as a preparation for graduate school or as a field of study for students interested in art in and of itself.

General Requirements
Bachelor of Science Degree
Total for Graduation ..................................................... 120 credits
General Education ..................................................... 44-58 credits
Major Studies ............................................................ 48-60 credits

Bachelor of Arts Degree
Students who wish to receive a Bachelor of Arts instead of a Bachelor of Science degree must:
1. Declare their intention of doing so.
2. Meet the requirements for a B.S.
3. Demonstrate fourth semester proficiency in a foreign language.

Note: There is no B.A. in art education.

Note: All art students (all emphases) must complete a sophomore year portfolio review. See advisor.
Art Major
Bachelor of Arts in Fine Art (Non-Teaching)

Mission Statement
The art program at the University of Wisconsin-Platteville is dedicated to high quality instruction in curricula emphasizing art theory, history and visual art creation. The curriculum is constructed to provide students with the fundamental background and specialized knowledge needed for analysis, understanding and creation of visual art. The program provides the broad knowledge in art needed to prepare students for graduate study.

Goals for Program Graduates
1. Develop conceptual understanding of art theory and history, as these areas of art study form the basis for informed appreciation of existing works and the creation of new art.
2. Develop competence in artistic creation.

Art Emphasis (48 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART</td>
<td>1010</td>
<td>Drawing I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1310</td>
<td>Drawing II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2020</td>
<td>Drawing III</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2010</td>
<td>Drawing IV</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1710</td>
<td>Painting I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2410</td>
<td>Painting II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2490</td>
<td>Painting III</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1420</td>
<td>Basic Design I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1520</td>
<td>Basic Design II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1740</td>
<td>Introduction to Digital Media</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2140</td>
<td>Art History I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2210</td>
<td>Art History II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2730</td>
<td>Art History IV</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>3340</td>
<td>Art History III</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>3530</td>
<td>Art History V</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>4230</td>
<td>Theory of Art</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>4930</td>
<td>Presentation and Marketing</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>4950</td>
<td>Senior Show</td>
</tr>
</tbody>
</table>

Electives: 12 ART credits

Graphic Design Emphasis (48 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART</td>
<td>1010</td>
<td>Drawing I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1310</td>
<td>Drawing II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1710</td>
<td>Painting I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2410</td>
<td>Painting II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1420</td>
<td>Basic Design I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1520</td>
<td>Basic Design II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART</td>
<td>1740</td>
<td>Introduction to Digital Media</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2140</td>
<td>Art History I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2210</td>
<td>Art History II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART</td>
<td>2730</td>
<td>Art History IV</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>3340</td>
<td>Art History III</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>3530</td>
<td>Art History V</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>4230</td>
<td>Theory of Art</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>4930</td>
<td>Presentation and Marketing</td>
</tr>
<tr>
<td>or</td>
<td>ART</td>
<td>4950</td>
<td>Senior Show</td>
</tr>
</tbody>
</table>

Students are strongly urged to enroll in:

* ART 4020 Computer Graphics for Artists 2 cr

Graphic Design Emphasis majors are required to have a Minor in Imaging Media from the Department of Communication Technologies. The course requirements include: COMMNCTN XXXX Software: Any 6 courses 6 cr, COMMNCTN 1230 Survey of Imaging 3 cr, COMMNCTN 1630 Introduction to Mass Media 3 cr, COMMNCTN 1930 Basic Photography 3 cr and COMMNCTN 3070 History of Imaging 3 cr.

Concentrations (choose one):

New Media Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN</td>
<td>2090</td>
<td>Principles of Interactivity</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN</td>
<td>3030</td>
<td>Multimedia Projects</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Photography Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN</td>
<td>2050</td>
<td>Photography II</td>
<td>3 cr</td>
</tr>
<tr>
<td>COMMNCTN</td>
<td>4500</td>
<td>Photography III</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
Bachelor of Science in Fine Arts – Art Education

Mission Statement

The art program at the University of Wisconsin-Platteville is dedicated to high quality instruction in curricula emphasizing art theory, history and visual art creation. The Bachelor of Science in Art Education curriculum is constructed to provide students with the fundamental background and specialized knowledge needed to analyze, understand, create and teach visual arts. The faculty of the Art Program seek to prepare students with the knowledge and skills to be successful art educators.

Goals for Program Graduates
1. Develop conceptual understanding of art theory and history, which are the foundation for all areas of art study.
2. Develop competence in the area of artistic creation.
3. Demonstrate potential to effectively communicate knowledge about art and the creation of art to elementary, middle level and secondary school students.
4. Learn how to make informed decisions about appropriate curricula for elementary, middle level and secondary students.

Art Education Emphasis (57-60 credits)

Required Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1010</td>
<td>Drawing I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 1310</td>
<td>Drawing II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 2020</td>
<td>Drawing III</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 2010</td>
<td>Drawing IV</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 1710</td>
<td>Painting I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 2410</td>
<td>Painting II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 2490</td>
<td>Painting III</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 1420</td>
<td>Basic Design I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 1520</td>
<td>Basic Design II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 2140</td>
<td>Art History I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 2210</td>
<td>Art History II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 2730</td>
<td>Art History IV</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 3340</td>
<td>Art History III</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 3530</td>
<td>Art History V</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 3220</td>
<td>Print Making I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 3320</td>
<td>Print Making II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 4230</td>
<td>Theory of Art</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 1740</td>
<td>Introduction to Digital Media</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 2920</td>
<td>Crafts I: Fiber and Fabrics</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 2520</td>
<td>Ceramics I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 4530</td>
<td>Art Education II: Elementary/Middle School Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 4630</td>
<td>Art Education III: Middle/High School Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 4930</td>
<td>Presentation and Marketing</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 4950</td>
<td>Senior Show</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

Electives: 12 ART credits

Art Minor (24 credits)

Required Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1010</td>
<td>Drawing I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 1310</td>
<td>Drawing II</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 1420</td>
<td>Basic Design I</td>
<td>2 cr</td>
</tr>
<tr>
<td>ART 2140</td>
<td>Art History I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 2210</td>
<td>Art History II</td>
<td>3 cr</td>
</tr>
<tr>
<td>ART 4230</td>
<td>Theory of Art</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Electives: 12 ART credits

Art Core Programs

Suggested First Year core for art emphasis, art education emphasis and graphic design emphasis:

Year 1 - 1st Semester:
- Drawing I: 2 cr
- Painting I: 2 cr
- Basic Design I: 2 cr
- General Requirements

Year 1 - 2nd Semester:
- Drawing II: 2 cr
- Painting II: 2 cr
- Basic Design II: 2 cr
- General Requirements

Suggested Second Year core for art emphasis and art education emphasis:

Year 2 - 1st Semester:
- Painting III: 2 cr
- Introduction to Digital Media: 3 cr
- Art History I: 3 cr
- General Requirements

Year 2 - 2nd Semester:
- Drawing III: 2 cr
- Art History II: 3 cr
- Sophomore Portfolio Review
- General Requirements

Suggested Second Year core for graphic design emphasis:

Year 2 - 1st Semester:
- Introduction to Digital Media: 3 cr
- Graphic Design I: 3 cr
- Art History I: 3 cr
- General Requirements

Year 2 - 2nd Semester:
- Graphic Design II: 3 cr
- Art History II: 3 cr
- Minor courses: 1-3 cr
- Sophomore Portfolio Review
- General Requirements

Select 6 elective credits in Studio 3-D
Select 4 additional credits
**Music**

www.uwplatt.edu/music

**Department Chair:** G. Daniel Fairchild  
**Office:** 180 Doudna Hall  
**Phone:** 608.342.1143  
**E-mail:** fairchig@uwplatt.edu

**Professors:**  
Robert K. Demaree  
Barry L. Ellis  
G. Daniel Fairchild  
Michael E. Lewis

**Associate Professors:**  
Joseph Caploe  
Eugene Alcalay

**Assistant Professor:**  
David Cooper

**Lecturers:**  
Allen Cordingley  
Margaret Cornils  
Susan Savage Day  
Rebekah Demaree  
Amber Dolphin  
Nancy Fairchild  
Matthew Gregg  
John Marco  
Bethany Plissey  
Kevin Price  
Bradley Townsend

---

**About the Music Program and Major**

The Department of Performing and Visual Arts Music program is designed to promote performance of music, the study of musical structure and form and knowledge of the history of music as well as the teaching of music. As one of the principal fine arts, music is the art that most deals with emotion and the one that directly communicates to the listener. Performance opportunities exist that help provide a rich cultural life for the campus, the community and the region.

Programs of music study leading to a Bachelor of Science or a Bachelor of Arts degree with and without music education certification are offered in the College of Liberal Arts and Education. Students who plan to teach at the elementary level, middle school level or secondary level may choose instrumental, choral, general music or combined certification programs (see advisors in the music unit of the Department of Performing and Visual Arts). Other degree emphases are available in instrumental music, vocal music and music and business.

Music education majors complete the College of Liberal Arts and Education general requirements, the School of Education proficiency requirements, the basic core curriculum for music majors and depth courses in music.

All students intending to become licensed teachers must satisfy the requirements outlined in the section, “Teacher Licensure,” listed under School of Education.

---

The Department of Performing and Visual Arts/Music is an accredited institutional member of the National Association of Schools of Music.

A degree in music may lead to a career in traditional areas such as teaching, performing, composing, and arranging, or to a career involving business, computers and recording technology.

The music unit at UW-Platteville is designed to provide many musical experiences and training. Close contact with faculty and modern facilities such as acoustically designed concert rehearsal and concert halls in the Center for the Arts are important features at UW-Platteville.

The music unit of the Department of Performing and Visual Arts serves the student body and the region as a cultural resource by providing general courses for all students, and specialized courses leading to those occupations requiring musical expertise. Recognizing that culturally aesthetic enrichment is a vital part of university life, a goal of the music unit is to provide high quality instructional experiences through performances by guest and faculty artists and student performing organizations.

Students of all academic disciplines are encouraged to participate in a music organization.

**General Requirements**

**Bachelor of Science Degree**

Total for Graduation ..................................................... 120 credits  
General Education ..................................................... 44-58 credits  
Music Courses ........................................................... 56-72 credits  
Professional education courses (music majors only) ....... 28 credits
Bachelor of Arts Degree

Students who wish to receive a Bachelor of Arts instead of a Bachelor of Science must:
1. Declare their intention of doing so.
2. Meet the requirements for a B.S.
3. Demonstrate fourth semester proficiency in a foreign language.

Note: There is no B.A. in music education.

Mission Statement

Bachelor of Science in Music Education

The music program at the University of Wisconsin-Platteville is dedicated to high quality instruction in curricula emphasizing music theory, history and performance. The Bachelor of Science in Music Education curriculum is constructed to provide students with the fundamental background and specialized knowledge needed for analysis, understanding, performance and teaching of music. We seek to assist in preparing students with the knowledge and skills to be successful music educators.

Goals for Program Graduates
1. Develop conceptual understanding of music theory and music history, as these areas of music study form the basis for listening, composing and performing.
2. Develop competence in music performance.
3. Demonstrate potential to effectively communicate knowledge about music and music making to elementary, middle level and secondary school students.
4. Learn how to make informed decisions about appropriate curricula for elementary, middle level and secondary school students.

Music Education Majors

Students must take the core courses listed below and an area of emphasis.

Music Education Core Courses (59 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 1090</td>
<td>Bodywork for Musicians</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1190</td>
<td>World Rhythm Rudiments</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1290</td>
<td>Computer Applications in Music Education</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1730</td>
<td>Music Theory I - Music Theory Fundamentals w/MIDI</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 1830</td>
<td>Music Theory II - Tonal Music Theory w/MIDI</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 1530</td>
<td>Aural Skills I</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1630</td>
<td>Aural Skills II</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2250</td>
<td>History and Literature of Western Music I</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 2350</td>
<td>History and Literature of Western Music II</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 2450</td>
<td>World Music Survey</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 2530</td>
<td>Aural Skills III</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2730</td>
<td>Music Theory III - Advanced Tonal Theory, Counterpoint and Composition</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 2920</td>
<td>Beginning Conducting</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3250</td>
<td>History and Literature of Western Music III</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3350</td>
<td>History and Literature of Western Music IV</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3530</td>
<td>Orchestration and Arranging</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3630</td>
<td>Aural Skills IV</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3730</td>
<td>Music Theory IV - Form and Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 3830</td>
<td>Music Theory V - 20th Century Music Theory</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3920</td>
<td>Intermediate Conducting</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4290</td>
<td>Media, MIDI and Recording Technology</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4910</td>
<td>Applied Instrument or Voice</td>
<td>6 cr</td>
</tr>
</tbody>
</table>

Choral Music Education Emphasis–B-21 (70 credits)

Includes Music Education Core Courses (59 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 2770</td>
<td>Diction I</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2870</td>
<td>Diction II</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3160</td>
<td>Elementary Music Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 3460</td>
<td>Choral Music Methods I</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3560</td>
<td>Choral Music Methods II</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4320</td>
<td>Advanced Conducting - Choral</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

General Music Education Emphasis–B-21 (66 credits)

Includes Music Education Core Courses (59 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 3860</td>
<td>Elementary Music Methods (for majors)</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 3760</td>
<td>Secondary General Music Methods</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUAP 4910</td>
<td>Applied Voice</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

Instrumental Music Education Emphasis–B-21 (72 credits)

Includes Music Education Core Courses (59 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 2170</td>
<td>High Brass Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2270</td>
<td>Low Brass Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2370</td>
<td>Percussion Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2470</td>
<td>String Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2570</td>
<td>High Woodwind Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2670</td>
<td>Double Reed Woodwind Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3260</td>
<td>Instrumental Music Methods I</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3360</td>
<td>Instrumental Music Methods II</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3660</td>
<td>Jazz Techniques</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4230</td>
<td>Advanced Conducting - Instrumental</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

Pianists may substitute MUSIC 3440 Accompanying 1 cr in the performing group requirements.

*Pianists must add 4 credits of voice or secondary instrument determined by the certification desired.
Bachelor of Arts in Music

Mission Statement

The music program at the University of Wisconsin-Platteville is dedicated to high quality instruction in curricula emphasizing music theory, history and performance. The Bachelor of Arts in Music (Non-teaching) curriculum is constructed to provide students with the fundamental background and specialized knowledge needed for analysis, understanding, performance and teaching of music. The program provides the broad knowledge in music to prepare students for graduate study in music.

Goals for Program Graduates
1. Develop conceptual understanding of music theory and music history, as these areas of music study form the basis for listening, composing and performing.
2. Develop competence in music performance.

Music Non-teaching Majors
Students must take the core courses listed below and an area of emphasis.

<table>
<thead>
<tr>
<th>Non-teaching Core Courses (53 credits)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 1090  Bodywork for Musicians</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1190  World Rhythm Rudiments</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1290  Computer Applications in Music</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1730  Music Theory I - Music Theory</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 1830  Music Theory II - Tonal Music</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 1530  Aural Skills I</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1630  Aural Skills II</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2730  Music Theory III - Advanced Tonal Theory, Counterpoint, and Composition</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 3730  Music Theory IV - Form and Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 2530  Aural Skills III</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3630  Aural Skills IV</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3830  Music Theory V - 20th Century Music Theory</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 2450  World Music Survey</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 2250  History and Literature of Western Music I</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 2350  History and Literature of Western Music II</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3250  History and Literature of Western Music III</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3350  History and Literature of Western Music IV</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 2920  Beginning Conducting</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4290  Music Media, MIDI and Recording Technology Performing Organizations (Major Ensemble)</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 1470  Master Class(Convocation) (7 semesters)</td>
<td>0 cr</td>
</tr>
<tr>
<td>MUAP 4910  Applied Instrument or Voice</td>
<td>7 cr</td>
</tr>
<tr>
<td>MUAP 4910  Recitals Semester</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

Instrumental Music Emphasis

(62 credits)

<table>
<thead>
<tr>
<th>Non-teaching core courses (53 credits):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 1340  Piano Techniques 1st Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1440  Piano Techniques 2nd Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2340  Piano Techniques 3rd Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2440  Piano Techniques 4th Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>Music Electives</td>
<td>5 cr</td>
</tr>
<tr>
<td>Electives (5 credits):</td>
<td></td>
</tr>
<tr>
<td>MUSIC 2170  High Brass Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2270  Low Brass Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2370  Percussion Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2470  String Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2570  High Woodwind Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2670  Double Reed Woodwind Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3170  String Pedagogy</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3430  Jazz Improvisation and Theory</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 3530  Orchestration and Arranging</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3920  Intermediate Conducting</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4230  Advanced Conducting - Instrumental</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3280  Wind Literature</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3120  Performing Organization</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUAP 4910  Applied Lessons (1 extra semester)</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

Vocal Music Emphasis

(64 credits)

<table>
<thead>
<tr>
<th>Non-teaching core courses (53 credits):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 2770  Diction I</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2870  Diction II</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1340  Piano Techniques 1st Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1440  Piano Techniques 2nd Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2340  Piano Techniques 3rd Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2440  Piano Techniques 4th Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>Music Electives</td>
<td>5 cr</td>
</tr>
<tr>
<td>Electives (5 credits):</td>
<td></td>
</tr>
<tr>
<td>MUSIC 2020  Music Theater</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3270  Vocal Pedagogy</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3430  Jazz Improvisation and Theory</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 3530  Orchestration and Arranging</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3920  Intermediate Conducting</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4320  Advanced Conducting - Choral</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3380  Choral Literature</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 1XX0  Performing Organization (1 extra organization)</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUAP 4910  Applied Voice (1 extra semester)</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

Piano Emphasis

(65 credits)

<table>
<thead>
<tr>
<th>Non-teaching core courses (53 credits):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 3440  Accompanying (2 sem)</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3370  Piano Pedagogy</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUAP 4910  Second instrument or voice applied lessons</td>
<td>4 cr</td>
</tr>
<tr>
<td>Music Electives</td>
<td>2 cr</td>
</tr>
<tr>
<td>Electives (5 credits):</td>
<td></td>
</tr>
<tr>
<td>MUSIC 3430  Jazz Improvisation and Theory</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 3530  Orchestration and Arranging</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3920  Intermediate Conducting</td>
<td>2 cr</td>
</tr>
</tbody>
</table>
Music and Business Major
(80 credits)

**Required Music Courses (56 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 1290</td>
<td>Computer Applications in Music Education</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1730</td>
<td>Music Theory I - Music Theory Fundamentals w/MIDI</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 1830</td>
<td>Music Theory II - Tonal Music Theory w/MIDI</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 1530</td>
<td>Aural Skills I</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1630</td>
<td>Aural Skills II</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2730</td>
<td>Music Theory III - Advanced Tonal Theory, Counterpoint and Composition</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 3730</td>
<td>Music Theory IV - Form and Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 2530</td>
<td>Aural Skills III</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3630</td>
<td>Aural Skills IV</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 2250</td>
<td>History and Literature of Western Music I</td>
<td>4 cr</td>
</tr>
<tr>
<td>MUSIC 2350</td>
<td>History and Literature of Western Music II</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3250</td>
<td>History and Literature of Western Music III</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3350</td>
<td>History and Literature of Western Music IV</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3830</td>
<td>Music Theory V: 20th Century Music Theory</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4290</td>
<td>Music Media, MIDI and Recording Technology</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4510</td>
<td>Seminar in Music Business I</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4520</td>
<td>Seminar in Music Business II</td>
<td>4 cr</td>
</tr>
<tr>
<td>MUAP XXXX</td>
<td>Applied Instrument or Voice</td>
<td>4 cr</td>
</tr>
<tr>
<td>MUSIC 1XX0</td>
<td>Performing Organizations (Major Ensemble)</td>
<td>7 cr</td>
</tr>
<tr>
<td>MUSIC 1340</td>
<td>Piano Techniques 1st Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1440</td>
<td>Piano Techniques 2nd Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2340</td>
<td>Piano Techniques 3rd Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2440</td>
<td>Piano Techniques 4th Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC</td>
<td>Master Class/Convocation (7 semesters)</td>
<td>0 cr</td>
</tr>
<tr>
<td>MUAP 4910</td>
<td>Recitals (one-half minimum)</td>
<td>2 cr</td>
</tr>
<tr>
<td>Music Electives</td>
<td></td>
<td>6 cr</td>
</tr>
</tbody>
</table>

**Electives (6 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 2170</td>
<td>High Brass Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2270</td>
<td>Low Brass Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2370</td>
<td>Percussion Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2470</td>
<td>String Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2570</td>
<td>High Woodwind Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2670</td>
<td>Double Reed Woodwind Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3430</td>
<td>Jazz Improvisation and Theory</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 3530</td>
<td>Orchestration and Arranging</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3920</td>
<td>Intermediate Conducting</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3280</td>
<td>Wind Literature</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 3380</td>
<td>Choral Literature</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUSIC 4290</td>
<td>Music Media, MIDI and Recording Technology</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

**Required Business Courses (24 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTING 2010</td>
<td>Financial Accounting I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ACCTING 2020</td>
<td>Management Accounting II</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 1200</td>
<td>Introduction to American Business Enterprise</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN 4990</td>
<td>Internship* (in a music related field)</td>
<td>1-8 cr</td>
</tr>
<tr>
<td>BUSADMIN Electives</td>
<td></td>
<td>4-11 cr</td>
</tr>
</tbody>
</table>

*Consult advisor to determine hours credited for internship.

**Music Minor (26 credits):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 1090</td>
<td>Bodywork for Musicians</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1190</td>
<td>World Rhythm Rudiments</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1730</td>
<td>Music Theory I: Music Theory Fundamentals w/MIDI</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 1830</td>
<td>Music Theory II - Tonal Music Theory w/MIDI</td>
<td>3 cr</td>
</tr>
<tr>
<td>MUSIC 1530</td>
<td>Aural Skills I</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1630</td>
<td>Aural Skills II</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 2350</td>
<td>History and Literature of Western Music II</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3250</td>
<td>History and Literature of Western Music III</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 3350</td>
<td>History and Literature of Western Music IV</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1340</td>
<td>Piano Techniques 1st Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC 1440</td>
<td>Piano Techniques 2nd Semester</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUSIC</td>
<td>Master Class/Convocation (4 semesters)</td>
<td>0 cr</td>
</tr>
<tr>
<td>MUAP 4910</td>
<td>Recitals (one-half minimum)</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

**Departmental Policies**

A grade of “C” or better is required for music majors to receive credit in all music courses. The performing organization requirements may be fulfilled only through Wind Ensemble, Symphony Band, Jazz Ensemble I, Orchestra, Marching Band, University Singers and Chamber Choir.

Instrumental music education majors must participate in Marching Band for a minimum of 4 credits. Any student receiving applied instruction must also be enrolled in an ensemble listed above using the same instrument or voice as their private instruction.

**Courses Offered**

**Applied Music**

Private instruction in voice, piano and orchestra and band instruments. Must be concurrently enrolled in Wind Ensemble, Symphony Band, Jazz Ensemble I, Orchestra, Marching Pioneers, University Singers or Chamber Choir. One half-hour lesson per week per credit. There are no applied music fees above the regular tuition charge, but special course fees (i.e. purchase of music) may apply. Lesson times and instructors to be arranged.
Prerequisites for MUAP 3010, 3110, 4010, 4110:

Successful completion of the Music Upper Divisional Examination. (Any student who fails to successfully complete the Music Upper Divisional Examination will be administratively dropped from the appropriate classes).

MUAP 1010 First semester 1 cr
MUAP 1110 Second semester 1 cr
MUAP 2010 Third semester 1 cr
MUAP 2110 Fourth semester 1 cr
MUAP 3010 Fifth semester 1 cr
MUAP 3110 Sixth semester 1 cr
MUAP 4010 Seventh semester 1 cr
MUAP 4110 Eighth semester 1 cr
MUAP 4910 Recital semester 2 cr

Section A - Piano
Section B - Voice
Section C - Flute
Section D - Oboe
Section E - Clarinet
Section F - Saxophone
Section G - Bassoon
Section H - Trumpet
Section I - Horn
Section J - Trombone
Section K - Euphonium
Section L - Tuba
Section M - Violin
Section N - Viola
Section O - Cello
Section P - String Bass
Section Q - Percussion
Section R - Jazz String Bass
Section S - Jazz Piano
Section T - Jazz Trombone

Speech Communication Minor

(24 credits)

THEATER  1430  Oral Interpretation of Literature  3 cr
THEATER  1930  Voice and Diction  3 cr
SPEECH  2250  Communication and Leadership in Small Groups  3 cr
ENGLISH  3940  Grammar in Context  3 cr
SPEECH  3010  Directed Studies in Forensics  1 cr
SPEECH  3250  Interpersonal Communication  3 cr
SPEECH  3500  Persuasion and Argumentation  3 cr
SPEECH  4500  Communication Theory  3 cr

DPI (Department of Public Instruction) certification for teaching also required courses:

COMMNCTN 1630  Introduction to Mass Media  3 cr
SPEECH  2010  Communication for Teachers  3 cr

(Required as a general education requirement instead of SPEECH 1010 Public Speaking)

SPEECH  3990  Teaching Methods in Speech Communication  3 cr

Speech Communication

www.uwplatt.edu/finearts/speechmain.htm

Department Chair:  G. Daniel Fairchild
Office:  180 Doudna Hall
Phone:  608.342.1143
E-mail:  fairchig@uwplatt.edu

Professors:
Mittie J. Nimocks
George Smith

Assistant Professor:
Daniel Dahlquist

Lecturers:
Tiffany Boeke
Martin Chislom
Jeffery T ebbe

About the Program and Minor

The speech communication program offered by the Department of Performing and Visual Arts is the study of human communication - people speaking and listening to one another. Speaking and listening are the most basic communication activities of our waking hours. The speech minor emphasizes communication as the foundation for all successful human activity.

The objective of the speech minor is to equip the graduate with the necessary skills, knowledge and attitude to speak with and listen to others effectively, whether one-on-one, in a group or part of a team.

A minor in speech is an excellent complement to most other majors on campus as well as to the pre-professional programs.

Improving oral communication skills through the study of speech will make graduates more valuable and effective professional assets to their employers, communities and nation.
Theater is an ancient art form that has been included in academic study for thousands of years. Theater provides an opportunity for the synthesis of multiple academic disciplines including dance, music, art, literature, psychology, history, philosophy, engineering and various technologies, among others.

The Department of Performing and Visual Arts Theater degree is designed to serve students who will be pursuing a career in theater performance, technical theater, theater education or continuing further study in the field at the graduate level.

The theater program at the University of Wisconsin-Platteville is unique in that it offers numerous hands-on learning opportunities for students in all aspects of the discipline, essential for the academic tradition of laboratory experimentation and resume building. Students will have the opportunity to act, direct, design, manage and construct theatrical productions several times each year. Current season offerings include a musical, several one act plays and two full-length plays. In addition, the UWP Theater Program supports the Traveling Theater Troupe, which provides an opportunity for students to tour the region performing a production in a variety of venues.

Balancing traditional course work and practical training, the theater students at UWP enjoy individualized attention and smaller class sizes not usually offered in larger programs.

Occupations in theater can include, but are not limited to, accountants, actors, arts administrators, agents, artistic directors, board operators, booking associates, box office managers, business managers, buyers, casting directors, company managers, costume designers, costume builders, creative drama instructors, critics, development directors, directors, drama therapists, dramaturgs, electricians, film/cinema professionals, fine arts facilitators, garment cutters, house managers, librettists, lighting designers, lighting technicians, literary managers, lyricists, makeup specialists, managing directors, marketing directors, master electricians, milliners, music directors, painters, print makers, personal managers, playwrights, puppetry artists, producers, production managers, properties designers/managers, publicists, radio and television professionals, rental managers, riggers, scenic artists, set designers, stage combat instructors, stagehands, stage managers, stage movement specialists, stitchers, teachers, technical directors, tour managers, voice and diction specialists and wig designers.

All students intending to become licensed teachers must satisfy the requirements outlined in the section, “Teacher Licensure,” listed under School of Education in this catalog.

Programs of study lead to a Bachelor of Science or a Bachelor of Arts degree.

**General Requirements**

**Bachelor of Science Degree**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for Graduation</td>
<td>120 credits</td>
</tr>
<tr>
<td>General Education</td>
<td>44-58 credits</td>
</tr>
<tr>
<td>Major Studies</td>
<td>36 credits</td>
</tr>
</tbody>
</table>

**Bachelor of Arts Degree**

Students who wish to receive a Bachelor of Arts instead of a Bachelor of Science must:

1. Declare their intention of doing so.
2. Meet the requirements for a B.S.
3. Demonstrate fourth semester proficiency in a foreign language.

Note: There is no B.A. in theater education.

Students must have a cumulative grade point average of 2.50 within the major studies for graduation.

**Mission Statement**

**Bachelor of Arts in Fine Arts –Theater Emphasis**

The theater program at the University of Wisconsin-Platteville is dedicated to high quality instruction in curricula emphasizing theater history, stagcraft, literature, directing and acting. The curriculum is constructed to provide students with the fundamental background and specialized knowledge needed for analysis and understanding of theater, stage performance and theatrical direction. The degree is designed to serve students who will be pursuing a career in theater performance, technical theater or continued study in the field at the graduate level. Theater majors may also seek Wisconsin Department of Public Instruction certification in Theater.

**Goals for Program Graduates**

1. Develop conceptual understanding of theater history and literature as these subjects form the foundation for all areas of theater study.
2. Develop competence in artistic performance and direction.
3. Develop skills, knowledge and competencies needed for teaching theater (for students seeking Department of Public Instruction certification).

**Theater Emphasis (36 credits)**

**General:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEATER 1130</td>
<td>Introduction to Theater</td>
<td>3 cr</td>
</tr>
<tr>
<td>THEATER 1930</td>
<td>Voice and Diction</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Production:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEATER 1230</td>
<td>Technical Theater I: Stagecraft</td>
<td>3 cr</td>
</tr>
<tr>
<td>THEATER 2730</td>
<td>Elements of Acting</td>
<td>3 cr</td>
</tr>
<tr>
<td>THEATER 3330</td>
<td>Play Direction</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**History:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEATER 4630</td>
<td>History of Theater and Drama</td>
<td>3 cr</td>
</tr>
<tr>
<td>THEATER 4730</td>
<td>History of Theater</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
Dramatic Literature (6 credits):
THEATER 2130 Play Reading and Analysis 3 cr
THEATER 2630 Early American Theater and Drama 3 cr
WOMSTD 2860 Women in Literature: Drama 3 cr
THEATER 4220 Recent and Contemporary Drama 3 cr
ENGLISH 3530 Modern American Drama 2-3 cr
ENGLISH 4330 Shakespeare 3 cr

Practicum:
THEATER 4930 Studio Production 3 cr

Electives:
6 hours of electives from the theater curriculum

DPI (Department of Public Instruction) certification for teaching required courses:
THEATER 3220 Teaching Methods in Theater and Drama 2 cr
and
THEATER 2220 Play Production 3 cr

Theater Minors

Production:
THEATER 1230 Technical Theater I: Stagecraft 3 cr
THEATER 2730 Acting I 3 cr
THEATER 3330 Play Direction 3 cr

History:
THEATER 4630 History of Theater and Drama I 3 cr
or
THEATER 4730 History of Theater and Drama II 3 cr

Dramatic Literature (6 credits):
THEATER 2130 Play Reading and Analysis 3 cr
THEATER 2330 Thematic Studies in Dramatic Literature 3 cr
THEATER 2630 Early American Theater and Drama 3 cr
WOMSTD 2860 Women in Literature: Drama 3 cr
THEATER 4220 Recent and Contemporary Drama 3 cr
ENGLISH 3330 British Drama 3 cr
ENGLISH 3530 Modern American Drama 2-3 cr
ENGLISH 4330 Shakespeare 3 cr

Practicum:
THEATER 4930 Studio Production 3 cr
(may be substituted for THEATER 3330)

Electives:
6 hours of electives from the theater curriculum

DPI (Department of Public Instruction) certification for teaching required courses:
THEATER 3220 Teaching Methods in Theater and Drama 2 cr
and
THEATER 1130 Introduction to Theater 3 cr
and
THEATER 2220 Play Production 3 cr

Students needing certification are encouraged to complete:
THEATER 4630 History of Theater and Drama I 3 cr
and
THEATER 4730 History of Theater and Drama II 3 cr

Music Theater Minor (24 credits)

THEATER 1230 Technical Theater I: Stagecraft 3 cr
THEATER 2730 Acting I 3 cr
THEATER 2830 Acting II 3 cr
THEATER 3920 Acting III 3 cr
THEATER 2900 Dance for Music Theater 3 cr
THEATER 1930 Voice and Diction 3 cr
THEATER 2950 Stage Movement 3 cr
THEATER 2130 Play Reading and Analysis 3 cr
THEATER Electives 24 cr

Performance Minor (24 credits)

THEATER 2730 Acting I 3 cr
THEATER 2830 Acting II 3 cr
THEATER 3920 Acting III 3 cr
THEATER 2900 Dance for Music Theater 3 cr
THEATER 1930 Voice and Diction 3 cr
THEATER 2950 Stage Movement 3 cr
THEATER 2130 Play Reading and Analysis 3 cr
THEATER Electives 24 cr

Technical Theater Minor
(25-26 credits)

THEATER 1230 Technical Theater I 3 cr
THEATER 2230 Technical Theater II 3 cr
THEATER 3250 Technical Theater III 3 cr
ART 1120 Introduction to Drawing 2 cr
ART 2130 Design and Color 3 cr
ART 2220 Perspective Drawing 3 cr
THEATER 2130 Play Reading and Analysis 3 cr
THEATER 3400 Drafting the Design 3 cr
THEATER XXXX Theater or Art Elective * 2-3 cr

* Course approved by department and students to fulfill requirements.
About the Department and Majors

The Department of Humanities at UW-Platteville offers the student an interdisciplinary field of study. As an academic field, the Humanities focus upon understanding the human condition through the contemplation and practice of the Liberal Arts. Students cannot major in the Humanities as such but only separately in English, Philosophy and Foreign Languages. The purpose of the study of the humanities is to explore the diversity of human thought and experience. Humanities courses teach students to contemplate and confront fundamental questions about reality, knowledge, justice and beauty. Our programs in English, Philosophy and Foreign Languages challenge students to explore a diversity of approaches to learning and life. Complementary minors in these fields are also available for students who seek to add a concentration in the Humanities to any major they may have chosen. The Humanities form a field of study that does not automatically prepare for a career track (except in education) but prepares the student for a variety of job skills. Humanities graduates primarily land jobs in business, government, freelancing environments, communication and publishing, teaching and other employment sectors. Many students choose a major in one of the Humanities programs in order to lay an excellent foundation for graduate school (M.A. and Ph.D.), including advanced degrees in English, Foreign Languages and Philosophy but also for law school, communication studies and careers in student services, profit organizations, and humanitarian sectors. A majority of the Humanities courses satisfy the university general education requirement. Students are also encouraged to participate in cultural life through a student-led Humanities Club and membership in Alt.Arts, which publishes a literary magazine and schedules poetry readings and other performances. Students in the Humanities also gain valuable experience from participation in exchanges with local and international schools, presentations at academic conferences and professional organizations, as well as study-abroad programs.

Graduates with a degree in any of the Humanities programs will have the following abilities and competencies:

- effectively communicate orally and in writing, ideally also in a second language;
- interpret and evaluate information from a variety of sources;
- make complex intellectual connections across disciplines, cultures and institutions;
- transform information into knowledge and knowledge into judgment and action;
- demonstrate intellectual agility and the ability to manage change;
- discern the ethical consequences of decisions and actions;
- acquire a deep understanding of one’s self and respect for the complex identities of others, including diverse histories and cultures;
- actively participate as citizens in a complex democracy and globalized world.
ENGLISH

www.uwplatt.edu/English.html

Department Chair: Patrick Hagen
Office: 349 Gardner Hall
Phone: 608.342.1925
E-mail: hagenp@uwplatt.edu

Professors:
Dennis Ciesielski
Laura Wendorff

Associate Professors:
Teresa Burns
Martha Drummond
Deborah Lewis
Peter Hadorn
Kathleen Tigerman

Assistant Professors:
Laura Beadling
J. Keith Hale
Yuanyuan Hu
Amy Parsons
Justin Ponder
Stormy Stipe
Amanda Tucker
Kory Wein

Lecturers:
Andrea Cool
Richard Garrett
David Gillota
Gary Kriewald
Harry Kronick
Wendy Perkins
April M. Schmidt
Stephen Shepherd

Academic Department Associate:
Lois Blackbourn

About the Department and Major

The English Program allows students the flexibility to choose from the following three English majors and five minors according to individual preference and career choices. Students may also obtain a Writing Certificate.

Literature Major (36 credits)

This traditional English Major prepares the student for careers and graduate work in English, law, publishing, library science, government, business and other professions.

English Education Major (36 credits)

In cooperation with the School of Education, this traditional English major prepares students for Middle/Secondary Education careers (Early Adolescence through Adolescence, Ages 10-21).

Professional Writing Major (36 credits)

This major prepares students for careers in a variety of writing fields, including journalism, publishing, technical communication, editing and communication.

English Non-Teaching Minor (24 credits)

This minor is designed for students who seek expertise in literature and writing for a variety of purposes and career options as a complement to their major in another program.

English Education Minor (24 credits)

This minor is designed for students seeking Middle/Secondary Education certification. It complements other teaching majors and qualifies the student to teach another subject.

Language Arts Minor (26 credits)

Designed for Education majors.

Teaching English As a Second or Other Language (TESOL) Minor (24 credits)

This minor is not only for English Education Majors. It also prepares students who are not enrolled in the School of Education programs for teaching non-native speakers in a variety of contexts. Students may gain employment at private and public schools as well as abroad at the secondary and post-secondary level.

Creative Writing Minor (24 credits)

This versatile minor focuses on the development of literary writing skills particularly in poetry, short story, non-fiction and other professional genres.

Writing Certificate (18 credits)

Designed for students who want a general education in English Studies and Writing but do not wish to major or minor in English.

Mission Statement

All English majors and minors are designed to prepare students for writing and teaching careers in a variety of professional environments, in which creativity, critical thinking and a broad cultural perspective are required. English courses teach proficiency in literary analysis, professional and creative writing, cultural analysis and creation and the mastery of rhetorical devices.

The basic pre-professional objective of the non-teaching English majors is twofold:

1. To provide graduates with a solid preparation for graduate studies (e.g. master's degree in Education, Master of Fine Arts, master's in Professional Writing/Communication, Literature, Library Science, Rhetoric and Composition, as well as Pre-Law).
2. To educate generalists for job placement in the publishing industry, in creative and editorial positions, in education, in businesses, in government and in non-profit agencies.

The more general, non-career oriented objective of the English program at UW-Platteville is to educate citizens who understand, think about and argue complex cultural issues. Specifically our literature and advanced composition courses are designed to broaden students’ perspectives and to increase their cultural literacy. Students gain personally and professionally from an education in American, British, world and other literatures by becoming intellectually more astute and literate. Technical writing experience and other professional skills, including training in Teaching English as a Second or Other Language, are all highly marketable skills that graduates acquire in our program. Our emphasis on the broad
variety of human experiences through internships, community-based (service) learning, as well as participation in forums on and off-campus, helps students to participate in meaningful ways in society. Graduates in English are taught to apply their knowledge in all personal, professional and social situations in which ethical decisions demand a deepened knowledge of the human condition and an understanding of the past.

Specific Teaching Objectives of the English Program

- To develop students' critical thinking skills through instruction in rhetoric, linguistic logic, argumentation and general communication skills
- To cultivate students' understanding of the role of literature and culture in social structures
- To develop students' knowledge of literary movements across centuries, periods and geographical regions
- To promote the ethical, aesthetic as well as socio-political elements of intellectual discourse
- To educate students regarding the cultural achievements of past and present thinkers, writers and wise people
- To raise student awareness of the diversity of voices and global connections

Student Learning Outcomes

Graduates of the English program shall be competent and knowledgeable in:
1. using language, in particular writing, to fit a variety of audiences and purposes;
2. integrating logic, argumentation and interpersonal communication skills (both verbal and non-verbal);
3. understanding a breadth of writing and ideas by female and male authors, both classic and contemporary, including a representative body of literature encompassing works of diverse national, cultural and ethnic groups;
4. distinguishing the function and variety of literary and aesthetic forms, including fiction, non-fiction, drama and poetry;
5. analyzing, interpreting, evaluating and appreciating print and non-print texts, including film;
6. applying historic and contemporary rhetorical theories to all media and communication contexts;
7. conducting research, using a variety of sources, and reporting findings in diverse and appropriate formats and media.

The Writing Center

Coordinator: Russell Brickey
Office: 303 Brigham Hall
Phone: 608.342.1615
E-mail: brickeyr@uwplatt.edu

At the Writing Center, student tutors, many of whom are English majors, meet one-to-one with UW-Platteville students to discuss all kinds of writing, from freshmen composition papers to lab reports to resumes. The goal of the Writing Center is to help students to become better writers. Through conversations with peer tutors, students will learn to more effectively read and revise their own writing.

General Requirements

Bachelor of Arts Degree

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for Graduation</td>
<td>120</td>
</tr>
<tr>
<td>General Education</td>
<td>44-58</td>
</tr>
<tr>
<td>Major Studies</td>
<td>36</td>
</tr>
</tbody>
</table>

First-Year Composition (6 credits)

English 1130 and 1230 are pre-requisites for most English courses. English majors must complete the first-year composition sequence or earn transfer credit for equivalent courses taken elsewhere before taking any English course at the 2000-level or above.

Foreign Language Requirement (up to 16 credits)

All English majors must earn a “C” or better in the required foreign language courses.

Professional Writing and Literature English Majors (4-16 credits)

Beyond UW-Platteville's General Education requirement for a foreign language, Professional Writing and English Literature majors are also required to complete one foreign language through the fourth college semester (French 2140, German 2340 or Spanish 2940). Students must contact Professor Laura Anderson in 228 Warner Hall, to determine at which level they should begin. Professor Anderson and other staff can also determine competency and retroactive credit.

English Education Majors (4-12 credits)

Beyond UW-Platteville's General Education requirement for a foreign language, English Education majors are also required to complete one foreign language through the third college semester (French 2040, German 2240 or Spanish 2840). Students must contact Professor Laura Anderson, the contact person of the Foreign Language Program in 228 Warner Hall, to determine at which level they should begin. Professor Anderson and other staff can also determine competency and retroactive credit.

Philosophy Requirement (up to 6 credits)

All English majors must earn a “C” or better in the required Philosophy courses.

Professional Writing and Literature English Majors (6 credits)

Students must take 6 credits from any Philosophy courses listed in the catalog.

English Education Majors (3 credits)

Students majoring in English Education must take either PHILOSOPHY 1130 Introduction to Philosophy or PHILOSOPHY 2530 Ethics.
Licensure Requirement for English Education Majors:

All students intending to become licensed teachers must satisfy the requirements outlined in the section “Teacher Licensure,” listed under the School of Education catalog description and course outline.

Writing Portfolio Requirement

During the first week of their senior year, all English majors must submit a portfolio in order to graduate. Students with a failing portfolio will be required to meet with the Rhetoric and Composition Committee to discuss a course of action for the improvement of their writing, which may include rewriting portfolio papers and taking additional courses. The requirements for the portfolio are available in the department office.

Prerequisites and Other Requirements

All literature courses, except ENGLISH 3930 Literature for Young Adults and ENGLISH 3990 Topics in Language, Literature or Writing, count as Humanities credit towards the general education requirements. All courses numbered 2000 or above have ENGLISH 1230 as a prerequisite.

Option I - English Literature Major (36 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 2130</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 2230</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 2330</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 2430</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 2530</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 2640</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 2650</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 4330</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 4620</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 4650</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

At least one of the above courses other than Shakespeare must focus on literature before 1800.

Literature courses at the 3000 level or above

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 3940</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 3940</td>
<td>3 cr</td>
</tr>
<tr>
<td>or ENGLISH 4620</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Writing courses at the 2000 level or above

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language, literature or writing courses</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Students must earn a “C” or better in these courses.

Option II - English Education Major (36 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Literature course</td>
<td>3 cr</td>
</tr>
<tr>
<td>American Literature course</td>
<td>3 cr</td>
</tr>
<tr>
<td>World Literature course</td>
<td>3 cr</td>
</tr>
<tr>
<td>Other/additional Literature courses</td>
<td>6 cr</td>
</tr>
</tbody>
</table>

(At least three of the above literature courses must be at the 3000 level or above.)

Creative Writing course | 3 cr |

(ENGLISH 2120, ENGLISH 3120, ENGLISH 3140, ENGLISH 3950)

Professional Writing course | 3 cr |

(ENGLISH 3000, ENGLISH 3240, ENGLISH 3360)

Fluency in a language other than English or completion of the third college semester in a foreign language (FRENCH 2040, GERMAN 2240, SPANISH 2840) | 0-12 cr |

ENGLISH 3030 The Teaching of Composition | 3 cr |

(Pre or corequisite for English 4730)

ENGLISH 3930 Literature for Young Adults | 3 cr |

(Pre or corequisite for English 4730)

ENGLISH 3940 Grammar in Context | 3 cr |

ENGLISH 4330 Shakespeare | 3 cr |

ENGLISH 4620 History of the English Language | 3 cr |

Students must earn a “B” average or better for these courses.

Required Courses for the School of Education (6 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 4730 Teaching English in Middle and Secondary Schools</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

(Pre- or co- requisites: ENGLISH 3030 and ENGLISH 3930)

Counts for total graduation credits, but does not count towards an English major

TEACHING 2130 Human Growth and Development | 3 cr |

Requirements for the School of Education

1. Pass Pre-Professional Skills Test (PPST)
2. Apply in sophomore year to the School of Education
3. Fulfill requirements on Middle/Secondary Education Checklist
4. Pass English Content Test (Praxis II)
5. Satisfy the requirements outlined in the section “Teacher Licensure Requirements” listed under Education in this catalog.

Option III - Professional Writing Major (36 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Literature</td>
<td>2130, 2230 or 2330</td>
</tr>
<tr>
<td>American Literature</td>
<td>2430 or 2530</td>
</tr>
<tr>
<td>Electives in literature at the 3000 level or above</td>
<td>6 cr</td>
</tr>
<tr>
<td>ENGLISH 4680 Writing Internship</td>
<td>1-8 cr</td>
</tr>
</tbody>
</table>

Required Courses (21 credits, 12 from English):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 2120 Creative Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3000 Technical Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3120 Seminar in Creative Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3140 Poetry Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3240 Advanced Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3360 Magazine Writing and Editing</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3940 Grammar in Context</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3950 Writing for Performance</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 4020 History and Theory of Rhetoric</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 4620 History of the English Language</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3990 Topics in Language, Literature or Writing (writing topics only)</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

COMPUTER 2830 Advanced Microcomputer Applications | 3 cr |

COMMNCTN 2030 Basic Newswriting and Reporting | 3 cr |

COMMNCTN 2110 Applied Communication (repeatable) | 1 cr |

COMMNCTN 3120 Applied Communication (repeatable) | 2 cr |

COMMNCTN 3830 Editing for Print | 3 cr |

Students must earn a grade of “C” or better in these courses.
**English Non-Teaching Minor**

*(24 credits)*

- American literature course 3 cr
- World literature course 3 cr
- ENGLISH 4330 Shakespeare 3 cr
- Writing courses at the 2000 level or above 6 cr
- Literature, language or writing courses 9 cr

Students must earn a “C” or better in these courses.

**English Education Minor**

*(24 credits)*

- British Literature course 3 cr
- American Literature course 3 cr
- World Literature course 3 cr
- Literature course 3 cr
- ENGLISH 3930 Grammar in Context 3 cr

*(ENGLISH 3930 is recommended and required for 5-12 licensure)*

Students must earn a “B” average or better in these courses.

At least 2 of the above literature courses must be at the 3000 level or above.

- ENGLISH 3940 Grammar in Context 3 cr
- ENGLISH 4730 Teaching English in Middle and Secondary Schools 3 cr
- Writing courses at the 2000 level or above 6 cr

**Requirements for the School of Education**

1. Pass Pre-Professional Skills Test
2. Apply in sophomore year to the School of Education
3. Fulfill requirements on Middle/Secondary Education Checklist
4. Pass English Content Test
5. Satisfy the requirements outlined in the section “Teacher Licensure Requirements” listed under Education in this catalog.

**Creative Writing Minor (24 credits)**

**Required courses:**

- ENGLISH 2120 Creative Writing* 3-6 cr
- ENGLISH 3120 Topics in Creative Writing* 3-6 cr
- ENGLISH 3140 Poetry Writing 3 cr
- ENGLISH 3360 Magazine Writing and Editing* 3-6 cr
- ENGLISH 3950 Writing for Performance 3 cr

**Required literature courses (6 credits, 3 credits from this list):**

- ENGLISH 2730 Contemporary Literature 3 cr
- ENGLISH 3810 The Modern Short Story 3 cr
- ENGLISH 3820 Modern Poetry 3 cr
- ENGLISH 3530 Modern American Drama 3 cr

* May be repeated for credit.

Students who take fewer than 24 credits from the above list may complete the minor by selecting up to 6 credits from:

- Any literature course 3-6 cr
- ENGLISH 3000 Technical Writing* 3 cr
- ENGLISH 3240 Advanced Writing 3 cr
- ENGLISH 3940 Grammar in Context 3 cr
- ENGLISH 4680 Writing Internship 3 cr
- COMMNCTN 2110 Applied Communication* 1 cr
- COMMNCTN 3120 Applied Communication* 2 cr

**Teaching English As a Second or Other Language Minor (TESOL)**

*(24 credits)*

**Required courses:**

- ENGLISH 3260 Language and Culture 3 cr
- ENGLISH 3250 Sociolinguistics 3 cr
- ENGLISH 3940 Grammar in Context 3 cr
- ENGLISH 4670 Methods of TESOL and Second Language Acquisition 3 cr
- ENGLISH 4740 Practicum in TESOL 3 cr

**A course which focuses on American minority communities, selected from:**

- ETHNSTDY 2130 The Native American Experience 3 cr
- ETHNSTDY 2200 Introduction to Ethnic Studies 3 cr
- ETHNSTDY 3240 African-American History: 1619 to present (cross offered - HISTORY) 3 cr
- ETHNSTDY 3400 History of Chicano Peoples in the U.S. 3 cr
- ETHNSTDY 3410 Chicano Literature (cross offered - ENGLISH) 3 cr
- ETHNSTDY 3730 Black Literature in America (cross offered - ENGLISH) 3 cr
- ETHNSTDY 3740 Asian American Literature (cross offered - ENGLISH) 3 cr
- ETHNSTDY 3750 American Literature of Ethnicity and Immigration (cross offered - ENGLISH) 3 cr

Fluency in a language other than English or completion of the intermediate sequence in a foreign language 0-8 cr

(French 2040-2140, German 2240-2340, Spanish 2840-2940)

**Students already fluent in a second language may select 6 credits from:**

Upper-division literature courses in any language

- ENGLISH 3030 The Teaching of Composition 3 cr
- ENGLISH 4010 Teaching of World Languages: Theory and Practice 3 cr
- ENGLISH 4730 Teaching English in Middle and Secondary Schools 3 cr

* May be accepted with permission of the department chair.

* May be repeated for credit.
Language Arts Minor (26 credits)

**Required literature courses**
*(5-6 credits, excluding ENGLISH 3930):*

- ENGLISH 3930 Literature for Young Adults 3 cr
- ENGLISH 3030 The Teaching of Composition 3 cr
- TEACHING 4420 Oral Language and Emergent Literacy 2 cr
- ENGLISH 3940 Grammar in Context 3 cr

**Required speech and/or theater courses (6 credits):**

- THEATER 1430 Oral Interpretation of Literature 3 cr
- THEATER 1930 Voice and Diction 3 cr
- THEATER 1230 Technical Theater I: Stagecraft 3 cr
- THEATER 2730 Acting I: Elements of Acting 3 cr
- SPEECH 2250 Communication and Leadership in Small Groups 3 cr
- SPEECH 3250 Interpersonal Communication 3 cr

**Required writing course (3 credits):**

- ENGLISH 2120 Creative Writing 3 cr
- ENGLISH 3120 Seminar in Creative Writing 3 cr
- ENGLISH 3000 Technical Writing 3 cr
- ENGLISH 3240 Advanced Writing 3 cr
- ENGLISH 3360 Magazine Writing and Editing 3 cr

Writing Certificate (18 credits)

**Required courses (18 credits, 12 from English):**

- ENGLISH 2120 Creative Writing 3 cr
- ENGLISH 3000 Technical Writing 3 cr
- ENGLISH 3120 Topics in Creative Writing 3 cr
- ENGLISH 3240 Advanced Writing 3 cr
- ENGLISH 3360 Magazine Writing and Editing 3 cr
- ENGLISH 3940 Grammar in Context 3 cr
- ENGLISH 3950 Writing for Performance 3 cr
- ENGLISH 3990 Topics in Language, Literature or Writing (Writing topics courses only) 3 cr
- ENGLISH 4620 History of the English Language 3 cr
- ENGLISH 4680 Writing Internship 3 cr
- COMMNCN 2030 Basic Newswriting and Reporting 3 cr
- COMPUTER 3030 Advanced Microcomputer Applications 3 cr
- COMMNCN 2110 Applied Communication (repeatable) 1 cr
- COMMNCN 3120 Applied Communication (repeatable) 2 cr
- COMMNCN 3830 Editing for Print 3 cr

Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

---

Foreign Languages

www.uwplatt.edu/humanities/forlang.htm

**Contact:** Laura Anderson
**Office:** 228 Warner Hall
**Phone:** 608.342.1171
**E-mail:** andersla@uwplatt.edu

**Professor:** Raymond Spoto (Spanish)

**Associate Professors:**
- Laura Anderson (French/Spanish)
- Mark Evenson (Spanish)
- Patrick Hagen (German)

**Assistant Professor:**
- Chris Schlenburg (Spanish)

**Lecturers:**
- Micah Andrews (Spanish)
- Rebecca Gottlieb (French)
- Edina Haslauer (German)
- Catherine Van Paemel (Spanish)

**Mission**

1. Serve well the general education mission of the university in the areas of foreign language competencies and the humanities.
2. Prepare students via language skills and cultural exposure for professions in business, law enforcement, communications, counseling, translation and other fields.
3. Prepare highly qualified foreign language teachers in conjunction with the Department of Instruction and the UW-Platteville School of Education through our teaching-minor and teaching-major programs. Students must also attain a level of mastery in the areas of teaching methods and knowledge of theories of second language acquisition.

**Goals and Objectives**

**Goal 1: Proficient Oral Communication Skills**
- Student Learning Outcome 1: Student will demonstrate minimum oral proficiency at a level equivalent to Intermediate High on the ACTFL Proficiency Scale or student will be able to discuss a wide range of general interest topics in most informal and some formal situations.
- Student Learning Outcome 2: Student will be able to be understood without difficulty by speakers unaccustomed to non-native speakers.

**Goal 2: Proficient Written Communication Skills**
- Student Learning Outcome 3: Student will demonstrate knowledge and skills in effective written presentation in informal and formal styles at a level roughly equal to the student's oral proficiency.
- Student Learning Outcome 4: Student will be able to read and understand a variety of authentic written materials.
Goal 3: Knowledge of Cultural Practices and Perspectives
- Student Learning Outcome 5: Student will complete a period of language immersion in residence in a country in which the target language is spoken.
- Student Learning Outcome 6: Student will be able to discuss the historical, geographical, political, socio-economical, literary and artistic features of a variety of regions and countries in which the target language is spoken.

Goal 4: Preparation of highly qualified Foreign Language teachers in conjunction with the UW-Platteville School of Education
- Student Learning Outcome 7: Student will meet Department of Public Instruction requirements for certification as a foreign language teacher.
- Student Learning Outcome 8: Student will attain a level of mastery in the areas of teaching methods and knowledge of theories of second language acquisition.

About the Foreign Languages Program and Majors
The foreign language program offers majors in German and Spanish, along with minors in French, German and Spanish. Students who major in foreign languages find career opportunities in many areas such as international business, marketing, civil-service work, diplomacy and law enforcement. Students who wish to teach French, German or Spanish must be admitted to the School of Education, meet all of the requirements for teacher certification and also take TEACHING 4060 Teaching World Languages: Theory and Practice (credits do not count toward major or minor).

Minor studies in French, German and Spanish are designed for students interested in combining a minor in a foreign language with other areas of study for the purpose of enhancing communication skills and career opportunities. Likewise, apart from the intellectual development that results from the study of the French, German or Spanish language, its literature and its civilization, students may also find professional employment in international business, marketing, civil service and teaching.

All students intending to become licensed teachers must satisfy the requirements outlined in the section, “Teacher Licensure,” listed under School of Education in this catalog.

Foreign Language Competency/Retroactive Credits
All students are required to demonstrate competency in a foreign language. The competency consists of the following: one year (two semesters) of one foreign language at the 1000 college level or two years (four semesters) of a foreign language in high school with a grade of “C” or higher in the second year of high-school foreign language study. Foreign languages other than the languages taught at UW-Platteville may satisfy this competency.

Students may receive retroactive college credit for their high school foreign language studies. Proficiency acquired in high school may be counted toward graduation and toward the number of credits in the major or minor. Students ordinarily earn a maximum of eight retroactive credits. However, students with high proficiency may earn more retroactive credit as determined by the department.

In order to earn retroactive credit, a student must enroll in a second-semester course or higher, and must earn a grade of “A” or “B” in that course. In addition to credit for the course completed, a student may then earn between 4 and 16 retroactive credits for the course or courses skipped at the 1000 or 2000 levels.

General Requirements
Bachelor of Arts Degree in German and Spanish
Total for Graduation ............................................................................ 120 credits
General Education .................................................................................. 44-58 credits
Major Studies .......................................................................................... 36 credits

Non-teaching German and Spanish majors, in addition to the requirements for the major, are also required to take 9 credits of English literature and philosophy with no more than two courses from one of the above areas. Students may select any philosophy or English literature course at the 2000 level or higher.

Students who major in a foreign language are required to take eight or nine credits in our Study Abroad Program at the 3000-4000 level. Similar or comparable cultural experiences could also be accepted.

Bachelor of Arts Degree in Teaching German and Spanish
(available for education majors only)
Total for Graduation ............................................................................ 120 credits
General Education .................................................................................. 44-58 credits
Major Studies .......................................................................................... 40 credits
(foreign-language education majors)

In addition to the credits required for German and Spanish majors in Education, there is also a requirement for one philosophy course (PHLSPHY 1130 Introduction to Philosophy or PHLSPHY 2530 Ethics).

Students who major in a foreign language are required to take 8 or 9 credits in our Study Abroad Program at the 3000-4000 level. Similar or comparable cultural experiences could also be accepted.

A Certificate in Foreign Languages
This program is designed to provide students with the language proficiency skills required for oral communication in German, French and Spanish. Conversation is stressed with some emphasis on civilization in order to provide knowledge and awareness of the culture. Students in this limited sequence of language courses are encouraged to couple foreign language skills with other areas of study so as to take advantage of career opportunities in foreign languages.

The program consists of 18 credits taken in an orderly sequence, which includes elementary and intermediate language courses along with a 2-credit course in practical conversation. Retroactive credit may be obtained for previous study in high school. See section under Foreign Language Competency/Retroactive Credits.
## FRENCH

The Department of Humanities offers a minor in French for students interested in combining a minor in a foreign language with other areas of study for the purpose of enhancing communication skills and career opportunities. Likewise, apart from the intellectual development that results from the study of the French language and francophone culture, students may also find professional employment in many different areas, including international business, marketing, civil service and teaching.

### French Minor (24 credits)

The minor requires a total of 24 credits with a minimum of 8 credits selected from courses numbered 3000 or higher. Students who minor in French must have a grade-point average of no lower than a 2.50 in the French courses they take.

### French Education Minor (28 credits)

The minor requires a total of 28 credits with a minimum of 12 credits selected from courses numbered 3000 or higher. TEACHING 4060 Teaching World Languages is an additional requirement of the School of Education (credits do not count toward minor). Likewise, students interested in teaching must satisfy the language immersion requirement by enrolling in FRENCH 3000 Foreign Language Travel Abroad Seminar for at least 2 credits. See the French instructor for details. French minors must have a GPA of no lower than a 2.75 in French courses.

| Required: |  
| Non-Teaching Minors | 8 cr of 3000 and above  
| Teaching Minors | 12 cr of 3000 and above |

| Courses: |  
| FRENCH 1040 | Elementary French (or equivalent) 4 cr  
| FRENCH 1140 | Elementary French (or equivalent) 4 cr  
| FRENCH 2040 | Intermediate French (or equivalent) 4 cr  
| FRENCH 2140 | Intermediate French (or equivalent) 4 cr  
| FRENCH 3000 | Foreign Language Travel Abroad Seminar 1-4 cr  

(Teaching Minors must take at least 2 cr for the purpose of immersion)

| Courses: |  
| FRENCH 3220 | Advanced French Grammar and Composition 2 cr  
| FRENCH 3240 | Advanced French Conversation 2 cr  
| FRENCH 3530 | Topics in French Literature and Culture 1-3 cr  
| FRENCH 4050 | Supervised Independent Study 1-4 cr  
| FRENCH 4060 | Survey of French Literature and Culture I 3 cr  
| FRENCH 4160 | Survey of French Literature and Culture II 3 cr  

### Required School of Education course:

| TEACHING 4060 | Teaching World Languages 3 cr  

(credit does not count toward minor)

## GERMAN

### German Major (36 credits)

The major requires a total of 36 credits with a minimum of 20 credits selected from courses numbered 3000 or higher. GERMAN 4220 Phonetics and GERMAN 3530 German Civilization are required. Students who major in German must have a grade-point average of no lower than a 2.50 in the German courses they take, and meet the study abroad requirement by completing 8-9 credits in our Study Abroad Program at the 3000-4000 level. Similar or comparable cultural experiences could also be accepted.

In addition, students completing a Bachelor of Arts degree are required to take 9 credits of English literature and philosophy with no more than two courses from each area (2000 level or above).

### German Education Major (40 credits)

The major requires a total of 40 credits with a minimum of 24 credits selected from courses numbered 3000 or higher. GERMAN 4220 Phonetics and GERMAN 3530 German Civilization are required. TEACHING 4060 Teaching World Languages is an additional requirement of the School of Education (credits do not count toward major). Students who major in German must have a grade-point average of no lower than a 2.75 in the language courses they take, and meet the study abroad requirement by completing 8-9 credits in our Study Abroad Program at the 3000-4000 level. Similar or comparable cultural experiences could also be accepted. In addition, German Education majors completing a Bachelor of Science degree are required to take either PHIL/SPHY 1130 Introduction to Philosophy or PHIL/SPHY 2530 Ethics.

### German Minor (24 credits)

The minor requires a total of 24 credits with a minimum of 8 credits selected from courses numbered 3000 or higher. Students who minor in German must have a grade-point average of no lower than a 2.75 in the German courses they take.

### German Education Minor (28 credits)

The minor requires a total of 28 credits with a minimum of 12 credits selected from courses numbered 3000 or higher. GERMAN 4220 Phonetics and GERMAN 3530 German Civilization are required. TEACHING 4060 Teaching World Languages is an additional requirement of the School of Education (credits do not count toward minor). Likewise, students interested in teaching must satisfy the language immersion requirement by enrolling in the Foreign Language Travel Abroad Seminar for at least 2 credits. See the German instructor for details. German minors must have a GPA of no lower than a 2.75 in German courses.
Courses:

GERMAN 1240 Elementary German 4 cr
GERMAN 1340 Elementary German 4 cr
GERMAN 2240 Intermediate German 4 cr
GERMAN 2340 Intermediate German 4 cr
GERMAN 3000 Foreign Language Travel Abroad Seminar 1-4 cr

(Excepting minors must take at least 2 cr for purpose of immersion)

GERMAN 3220 German Conversation and Composition I 2 cr
GERMAN 3320 German Conversation and Composition II 2 cr
GERMAN 3330 German Literature of the 20th Century 3 cr
GERMAN 3430 German Literature of the 19th Century 3 cr
GERMAN 3530 German Civilization 3 cr
GERMAN 4220 Phonetics 2 cr
GERMAN 4250 Supervised Independent Study 1-4 cr

Required School of Education course:

TEACHING 4060 Teaching World Languages 3 cr

Spanish Minor (24 credits)

The minor requires a total of 24 credits with a minimum of 8 credits selected from courses numbered 3000 or higher. Students who minor in Spanish must have a grade-point average of no lower than a 2.50 in the Spanish courses they take.

Spanish Education Minor (28 credits)

The minor requires a total of 28 credits with a minimum of 12 credits selected from courses numbered 3000 or higher, including courses in SPANISH 4820 Phonetics and SPANISH 3830 Spanish Civilization. TEACHING 4060 Teaching World Languages is an additional requirement of the School of Education (credits do not count toward minor). Likewise, students interested in teaching must satisfy the language immersion requirement by enrolling in the Foreign Language Travel Abroad Seminar for at least 2 credits. See the Spanish instructor for details. Spanish minors must have a GPA of no lower than a 2.75 in Spanish courses.

Spanish Major (36 credits)

The major requires a total of 36 credits with a minimum of 20 credits selected from courses numbered 3000 or higher, including courses in SPANISH 4820 Phonetics and SPANISH 3830 Spanish Civilization. Students who major in Spanish must have a grade-point average of no lower than a 2.50 in the Spanish courses they take, and meet the study abroad requirement by completing 8-9 credits in our Study Abroad Program at the 3000-4000 level. Similar or comparable cultural experiences could also be accepted. In addition, students completing a Bachelor of Arts degree are required to take 9 credits of English literature and philosophy with no more than 2 courses from each area (2000 level or above).

Spanish Education Major (40 credits)

The major requires a total of 40 credits with a minimum of 24 credits selected from courses numbered 3000 or higher, including courses in SPANISH 4820 Phonetics and SPANISH 3830 Spanish Civilization. TEACHING 4060 Teaching World Languages is an additional requirement of the School of Education (credits do not count toward major). Students who major in Spanish must have a grade-point average of no lower than a 2.75 in the Spanish courses they take, and meet the study abroad requirement by completing 8-9 credits in our Study Abroad Program at the 3000-4000 level. Similar or comparable cultural experiences could also be accepted. In addition, Spanish Education majors completing a Bachelor of Science Degree are required to take either PHILSPHY 1130 Introduction to Philosophy or PHILSPHY 2530 Ethics.

Spanish Minor (24 credits)

The minor requires a total of 24 credits with a minimum of 8 credits selected from courses numbered 3000 or higher. Students who minor in Spanish must have a grade-point average of no lower than a 2.50 in the Spanish courses they take.

Spanish Education Minor (28 credits)

The minor requires a total of 28 credits with a minimum of 12 credits selected from courses numbered 3000 or higher, including courses in SPANISH 4820 Phonetics and SPANISH 3830 Spanish Civilization. TEACHING 4060 Teaching World Languages is an additional requirement of the School of Education (credits do not count toward minor). Likewise, students interested in teaching must satisfy the language immersion requirement by enrolling in the Foreign Language Travel Abroad Seminar for at least 2 credits. See the Spanish instructor for details. Spanish minors must have a GPA of no lower than a 2.75 in Spanish courses.

Spanish Major (36 credits)

The major requires a total of 36 credits with a minimum of 20 credits selected from courses numbered 3000 or higher, including courses in SPANISH 4820 Phonetics and SPANISH 3830 Spanish Civilization. Students who major in Spanish must have a grade-point average of no lower than a 2.50 in the Spanish courses they take, and meet the study abroad requirement by completing 8-9 credits in our Study Abroad Program at the 3000-4000 level. Similar or comparable cultural experiences could also be accepted. In addition, students completing a Bachelor of Arts degree are required to take 9 credits of English literature and philosophy with no more than 2 courses from each area (2000 level or above).

Spanish Education Major (40 credits)

The major requires a total of 40 credits with a minimum of 24 credits selected from courses numbered 3000 or higher, including courses in SPANISH 4820 Phonetics and SPANISH 3830 Spanish Civilization. TEACHING 4060 Teaching World Languages is an additional requirement of the School of Education (credits do not count toward major). Students who major in Spanish must have a grade-point average of no lower than a 2.75 in the Spanish courses they take, and meet the study abroad requirement by completing 8-9 credits in our Study Abroad Program at the 3000-4000 level. Similar or comparable cultural experiences could also be accepted. In addition, Spanish Education majors completing a Bachelor of Science Degree are required to take either PHILSPHY 1130 Introduction to Philosophy or PHILSPHY 2530 Ethics.
About the Philosophy Program and Major

Philosophy literally means the “love of wisdom.” As a discipline of the mind, it calls us to think critically about the most fundamental questions of life. What does it mean to be human? How are we humans related to the rest of reality? What constitutes reality? Is the universe friendly or indifferent to human purpose? To what extent are we free or not free? What purposes ought we to pursue? What is good and evil? What are the possibilities and limitations of human power and understanding? By what criteria can such questions be addressed? What constitutes knowledge? Are there different ways of knowing? What role do assumptions play in what we think is true? By challenging students to think carefully about questions like these, the philosophy program provides an excellent foundation for graduate school as well as a pathway not only to making a life but also to making a living in careers such as law, teaching, business, the ministry, journalism and art.

Philosophy offers two programs: a major in philosophy and a minor in philosophy. Both programs encourage students to address in a disciplined way the most fundamental questions of life.

Statement of Purpose in Light of the UW-Platteville Mission Statement

With regard to our mission, the Philosophy program has two main goals:

The first goal is to help students in their courses, but especially our philosophy majors and minors, to become what UW-Platteville pledges in the first item of its mission statement, namely, “to become more ethically sensitive through the careful study of philosophy;”

The second goal is to provide our majors and minors the opportunity to develop in-depth their ability to think critically about the most fundamental (and inescapable) questions that humans can raise about reality, knowledge and values. As a corollary to this second goal, we aim to give our majors and minors a solid preparation for whatever they pursue after graduation, whether it be graduate studies, law school, medicine, education, academic computing, journalism, social work, ministry, a fine art or business.

Student Learning Outcomes

Students who major or minor in philosophy will:

1. acquire a broad understanding of the history of Western philosophy;
2. become more ethically sensitive through the careful study of various ethical theories;
3. enhance their ability to analyze and clarify ideas;
4. refine their ability to think logically;
5. demonstrate their ability to present their ideas and arguments effectively, both orally and in writing.

General Requirements

Bachelor of Arts Degree

Total for Graduation..................................................120 credits
General Education..................................................44-58 credits
Major Studies ..........................................................36 credits

Philosophy majors, in addition to the requirements for the major, are also required to take one of the following foreign language courses: FRENCH 2140, GERMAN 2340 or SPANISH 2940. Majors in Philosophy are also required to take two English literature courses at the 2000 level or above.

Philosophy Major (36 credits)

The major requires a minimum of 36 credits, including PHILSPHY 1130 Introduction to Philosophy or PHILSPHY 2230 Contemporary Worldviews, PHILSPHY 2330 Origins of Western Philosophy, PHILSPHY 2430 Philosophy in the Modern World, four 3000-level seminars and two 4000-level seminars. Religious studies courses and PHILSPHY 4330 Philosophy of Education may not be taken for credit toward a major in philosophy.

Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHILSPHY</td>
<td>Introduction to Philosophy</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Peace Studies: Issues, Ideas and Morality of Nuclear War</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Contemporary Worldviews</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Origins of Western Philosophy</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Philosophy in the Modern World</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Ethics</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Logic</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Philosophy of History</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Philosophy of Religion</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Ontology and Ethics</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Social Philosophy</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Philosophy’s Feminist Future: From Powerism to Personalism</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Philosophy of Law</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Seminar in Philosophy</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Cooperative Field Experience</td>
<td>1-8 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Individual Research in Philosophy</td>
<td>1-3 cr</td>
</tr>
</tbody>
</table>

Philosophy Minor (24 credits)

The minor requires a minimum of 24 credits, including the same courses and restrictions as the major except that only two 3000-level seminars and one 4000-level seminar are required.

Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHILSPHY</td>
<td>Introduction to Philosophy</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td>PHILSPHY 2230 Contemporary Worldviews</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Origins of Western Philosophy</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHILSPHY</td>
<td>Philosophy in the Modern World</td>
<td>3 cr</td>
</tr>
<tr>
<td>Two 3000-level seminars and one 4000-level seminar</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contact:
Shane Drefcinski
Office: 339 Gardner Hall
Phone: 608.342.1828
E-mail: drefcins@uwplatt.edu

Associate Professor:
Shane Drefcinski

Assistant Professors:
Mary Lenzi (on leave)
Michael Sharkey

Lecturer:
Anthony Valentine

www.uwplatt.edu/philosophy.html
Department Chair: Elizabeth Gates
Office: 231 Warner Hall
Phone: 608.342.1724
E-mail: gatese@uwplatt.edu

Professor Emeritus:
William K. Miller

Professors:
Patricia Bromley
Chetna Narayan
Theron Parsons
Joan E. Riedle
Marc Wruble

Associate Professors:
Elizabeth Gates
Corinne Enright

Assistant Professor:
Sean Shiverick

Lecturers:
Amy Baus
Valerie Gill-Mast
Theresa Kraemer
Craig Miller
Rita Udelhoven
Judy Wang

Academic Department Associate:
Sue Vavricka

MAJORS
Psychology
Applied Business Emphasis
Human Services Emphasis
Social Sciences Comprehensive

MINOR
Psychology

Mission
The primary goal of the Psychology Department is to prepare students for professional human service roles and/or graduate study in psychology and related fields. Our program fosters (1) the requisite core of knowledge about the discipline, (2) an exposure to applied aspects of the field, and (3) a greater awareness of self, others and sociocultural influences. This goal serves the institution’s mission of broadening students’ perspectives, increasing their ethical sensitivity and preparing them for their ultimate roles as competent professionals.

Student Learning Outcomes for the Psychology Major
The department adopts as objectives the ten guidelines developed by the American Psychological Association Task Force on Undergraduate Major Competencies.

Student learning outcomes specific to the discipline are:
1. Graduates will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
2. Graduates will understand and apply basic research methods in psychology, including research design, data analysis and interpretation.
3. Graduates will respect and use critical and creative thinking, skeptical inquiry and, when possible, the scientific approach to solve problems related to behavior and mental processes.
4. Graduates will understand and apply psychological principles to personal, social and organizational issues.
5. Graduates will be able to weigh evidence, tolerate ambiguity, act ethically and reflect other values that are the underpinnings of psychology as a discipline.

Student Learning Outcomes Fulfilled As Part of a Liberal Arts Education and Enhanced in the Psychology Program:
1. Graduates will demonstrate information competence and the ability to use computers and other technology for many purposes.
2. Graduates will be able to communicate effectively in a variety of formats.
3. Graduates will recognize, understand and respect the complexity of sociocultural and international diversity.
4. Graduates will develop insight into their own and others’ behavior and mental processes and apply effective strategies for self-management and self-improvement.
5. Graduates will emerge from the major with realistic ideas about how to implement their psychological knowledge, skills and values in occupational pursuits in a variety of settings.
About the Department and Major

Psychology is the empirical and theoretical study of behavior and mental life. It is a science that investigates the causes and dynamics of behavior patterns, and it is a profession that applies knowledge, skills and techniques to the solutions of individual and social problems.

A psychologist may be either a scientist, a practitioner or both, who specializes in the study of behavior and the treatment of behavior-related problems. Educational and professional experiences help the psychologist to understand normal human developmental patterns and how people normally perceive, think and behave in a wide variety of environments and under many different conditions. The scientist conducts research to add to the ever-expanding font of knowledge available to colleagues and the general public. The practitioner is trained to provide professional assistance to children, adolescents and adults, as well as to couples, families and groups and may also provide services to schools, agencies, organizations, industries and institutions.

Students major in psychology for a variety of reasons:

1. as preparation for graduate work in psychology;
2. as a liberal arts preparation for employment in a wide variety of semi-professional or psychology-related fields, including management and personnel work, sales and services, and social service work;
3. as a second major in support of a more vocationally-oriented major. Many psychology majors also major in criminal justice, business and other related fields.
4. In addition, there are a significant number of students who major in psychology as pre-professional undergraduates in preparation for law, clergy or medicine, or to complete a bachelor's degree for nursing. Others have no more specific goal in mind than to obtain a high quality liberal arts education.

In cooperation with the Department of Criminal Justice, undergraduate psychology majors may complete the course work needed for the State of Wisconsin Social Worker Training Certificate.

General Requirements

Total for Graduation ........................................... 120 credits
General Education .............................................. 44-58 credits
Major Studies .................................................... 36 credits

Psychology Major (36 credits)

All majors will complete the required sequence of courses. Majors are advised to select either the human services emphasis or the applied business emphasis, or to pursue a career-related minor or second major.

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCHLGY 1130</td>
<td>General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 2230</td>
<td>Introduction to Experimental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3960</td>
<td>Behavioral Research I</td>
<td>2 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3970</td>
<td>Behavioral Research II</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4330</td>
<td>History and Systems of Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>MATH 1830</td>
<td>Elementary Statistics*</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 3000</td>
<td>Technical Writing</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

* Does not count toward the 36 credits for the major.

Elective Category 1: Applied Courses (6 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCHLGY 3010</td>
<td>Industrial Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3130</td>
<td>Child Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3230</td>
<td>Adolescent Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3990</td>
<td>Psychology of Adulthood and Aging</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4830</td>
<td>Psychology and the Law</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Elective Category 2: Experimental-Content Courses (6 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCHLGY 3000</td>
<td>Cognitive Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3030</td>
<td>Learning and Behavior</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3430</td>
<td>Physiological Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3530</td>
<td>Social Psychology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Elective Category 3: Clinical Courses (6 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCHLGY 4030</td>
<td>Theories of Personality</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4430</td>
<td>Abnormal Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4840</td>
<td>Substance Abuse: Theory, Assessment and Intervention</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4930</td>
<td>Techniques of Counseling and Psychotherapy</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Electives (4 credits): (Select additional courses from the above elective categories or from the following courses.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCHLGY 2010</td>
<td>Careers in Counseling and Human Services</td>
<td>1 cr</td>
</tr>
<tr>
<td>PSYCHLGY 2030</td>
<td>Psychology of Personal Adjustment</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 2530</td>
<td>Psychology of Women</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3630</td>
<td>Psychology of Human Sexuality</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 3830</td>
<td>Psychology and Religion</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4020</td>
<td>Contemporary Issues in Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4660</td>
<td>Cooperative Field Experience*</td>
<td>1-8 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4730</td>
<td>Independent Study in Psychology</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4940</td>
<td>Advanced Techniques of Counseling and Psychotherapy</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY 4950</td>
<td>Human Service Work with Groups and Organizations</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

* Four credits of Cooperative Field Experience may count toward the 36 credits required for the major; up to 8 credits may count toward the 120 credits required for graduation.

Departmental Writing Requirements

In addition to the completion of 36 credits in psychology, all psychology majors must also successfully complete the following writing requirements:

1. Completion of Freshman Composition 1130 and 1230 with a minimum grade of “C”, or verification of testing-out of 1130 by the Department of Humanities (English).
2. Satisfactory completion of papers in those courses in which papers are required, which are evaluated for ability to communicate in written form as well as knowledge of psychological concepts.
3. Satisfactory completion of the junior writing exam. During the first semester of a student’s junior year, each major will write an essay which will be evaluated for writing competence and psychological content.
Course Grade and Prerequisite Requirements

1. A grade of “C” or better must be earned in all psychology courses that contribute to the 36 credit requirement for a psychology major.
2. A grade of “C” or better is required in PSYCHLGY 1130 General Psychology.
3. A grade of “C” or better is required in PSYCHLGY 2230 Introduction to Experimental Psychology in order to enroll in PSYCHLGY 3960 Behavioral Research I and PSYCHLGY 3970 Behavioral Research II.
4. Elementary Statistics (MATH 1830) must be successfully completed (“D” or better) before taking Behavioral Research I (PSYCHLGY 3960).

Requirements for students declaring a psychology major once they are already students at UWP:
1. Completion of General Psychology 1130 with a grade of “C” or better.
2. An overall GPA of at least 2.00.

Psychology Emphases

Emphases within the major: Completion of an emphasis, a career-related minor or a second major is strongly recommended.

Human Services Emphasis

This includes appropriate selection of electives from the elective categories of the psychology major plus additional courses, requiring 15-18 credits beyond the minimum 36 for the major.

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCHLGY/4840 Substance Abuse: Theory, Assessment and Intervention</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY/4430 Abnormal Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY/4930 Techniques of Counseling and Psychotherapy</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY/4940 Advanced Techniques of Counseling and Psychotherapy</td>
<td>3 cr</td>
</tr>
<tr>
<td>or PSYCHLGY/4950 Human Service Work w/Groups and Organizations</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY/4660 Cooperative Field Experience</td>
<td>3 cr above</td>
</tr>
</tbody>
</table>

Plus 6 credits in applied course work (e.g., PSYCHLGY 3330, social work policy, AODA counseling, and/or related course work) approved by academic advisor. ENGLISH 3000 Technical Writing is also strongly recommended.

The course work in this emphasis is recommended by the Psychology Department to students interested in pursuing a career in human service professions or in applying for the State of Wisconsin Social Work Training Certificate. Obtaining this certification may require course work or training beyond that provided at UW-Platteville. Please check regularly with your advisor regarding possible revisions.

Applied Business Emphasis

This includes appropriate selection of electives from the elective categories of the psychology major plus additional courses, requiring 15-18 credits beyond the minimum 36 for the major.

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSADMIN/2330 Leadership and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN/2630 Introduction to Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN/3030 Human Resource Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>BUSADMIN/3700 Marketing Research</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY/3010 Industrial Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY/4660 Cooperative Field Experience</td>
<td>3 cr above</td>
</tr>
</tbody>
</table>

A technical writing course (ENGLISH 3000 or COMMNCTN 3010) and BUSADMIN 3630 Advertising are also strongly recommended.

The course work in this emphasis is recommended by the Psychology Department to students interested in pursuing a career in business fields related to psychology.

Psychology Minor (24 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCHLGY/1130 General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSYCHLGY/2230 Introduction to</td>
<td>3 cr</td>
</tr>
<tr>
<td>Experimental Psychology</td>
<td></td>
</tr>
<tr>
<td>or PSYCHLGY/3130 Child Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>or PSYCHLGY/3230 Adolescent Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>or PSYCHLGY/4030 Theories of Personality</td>
<td>3 cr</td>
</tr>
<tr>
<td>or PSYCHLGY/4430 Abnormal Psychology</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

The remaining 12 credits must be selected from other psychology courses offered by the Department of Psychology. A grade of “C” or better must be earned in all psychology courses that contribute to the psychology minor.

Social Sciences Comprehensive Major

Students may complete a social sciences comprehensive major with an emphasis in psychology, economics, geography, history, political science or sociology. Please refer to the catalog section “Social Sciences Comprehensive” for details.
**DEPARTMENT OF SOCIAL SCIENCES**

Department Chair: J. Elmo Rawling  
Office: 153 Gardner Hall  
Phone: 608.342.1680  
E-mail: rawlingj@uwplatt.edu

Academic Department Associate:  
Kathleen Faull

**MAJORS**  
**Economics**  
Comprehensive Business and Economics  
Computer Science Concentration  
Business and Economics with Vocational  
Business Studies Concentration  
Geography  
History  
International Studies Comprehensive  
Political Science  
Social Sciences Comprehensive  
Economics Emphasis  
Geography Emphasis  
History Emphasis  
Psychology Emphasis  

**MINORS**  
Economics  
Geography  
Geology  
Environmental Science  
History  
International Studies  
Political Science  
Social Sciences  
Sociology

**About the Department and Majors**

The Department of Social Sciences, a combined program in the liberal arts, offers courses of study which challenge students to develop an understanding of the dynamics of individual and social behavior from a number of perspectives. The department offers programs in economics, environmental earth science, geography, geology, history, international studies, political science, social sciences comprehensive, and sociology. Descriptions of these programs and courses are found below.

While the study of social sciences may also include criminal justice and psychology, these programs are listed under their own department headings.

**ECONOMICS**

Contact: Terrence L. Liska  
Office: 451 Warner Hall  
Phone: 608.342.1241  
E-mail: liska@uwplatt.edu

**Professors:**  
Terrence L. Liska  
Abdollah S. Soofi

**Associate Professors:**  
John Ifediora  
Brian W. Peckham

**MAJORS**  
Comprehensive Business and Economics  
Computer Science Concentration  
Comprehensive Social Sciences with a Concentration in  
Economics-Economics Education (Teaching)

**MINOR**  
Economics

**About the Economics Program and Major**

The economics program at UW-Platteville is designed to bridge the gap between liberal and vocational education. In fulfilling requirements for the economics major, the student will master the analytical core of economics as well as functional areas of business and behavioral sciences and the analytical approach to problem solving.

Economics is the social science of production, distribution and consumption of goods and services. The study of economics, in part, concentrates on the study of factors of production, i.e. natural resources, capital, labor and entrepreneurship. Economic ideas confront us every day, whether we are exchanging our labor for money or our money for goods and services, borrowing or saving or electing officials to represent us. We face many complex problems directly related to the economy, including inflation, unemployment, pollution, energy shortages and government deficits. The study of economics helps us to understand the nature and causes of such problems and enables us to develop policies, programs and strategies for dealing with them. A background in economics has cultural, ethical and political value and enables an individual to be a more effective decision maker as a producer, consumer and citizen.

The department offers a 36-credit major and a 24-credit minor in economics, a 60-credit comprehensive business and economics major (with concentrations available in computer science or in vocational business studies, if desired) and an economics concentration in the social science teaching major. For more information about the teaching major, contact the director of the School of Education.
Students in all economics programs are encouraged to take advantage of foreign study opportunities, including the cooperative programs with the University of the Americas in Puebla, Mexico; St. Marys College in London, England and the Spanish-American Institute in Seville, Spain.

**General Requirements**

**Bachelor of Science Degree**

- Total for Graduation: 120 credits
- General Education: 44-58 credits
- Major Studies: 36 or 60 credits

**Comprehensive Business and Economics (60 credits)**

**Required courses:**
- BUSADMIN 2330 Leadership and Management 3 cr
- BUSADMIN 2630 Introduction to Marketing 3 cr
- BUSADMIN 3620 Financial Management 3 cr
- ECONOMIC 2130 Principles of Macroeconomics 3 cr
- ECONOMIC 2230 Principles of Microeconomics 3 cr
- ECONOMIC 2410 Interpretation of Business and Economic Data 3 cr
- ECONOMIC 3330 Intermediate Microeconomics 3 cr
- ECONOMIC 3340 Intermediate Macroeconomics 3 cr
- ACCTING 2010 Financial Accounting 3 cr
- ACCTING 2020 Management Accounting 3 cr
- ACCTING 3000 Accounting Issues for Managers 3 cr
- ECONOMIC 4930 Senior Seminar 3 cr

Students majoring in business can get a double major in business and in comprehensive business and economics by completing three courses in addition to those required for the business major.

Note: The balance of the 60-credit program consists of elective courses chosen from business, economics and selected computer science courses. See the chairperson of the Department of Economics for further information.

**Comprehensive Business and Economics with Computer Science Concentration**

Available by taking the following computer science requirements in addition to the above 60-credit program.

**Required courses:**
- COMPUTER 1430 Introduction to Computer Science with C++ 3 cr
- COMPUTER 2230 Computer Program for Business Systems 3 cr
- COMPUTER 3130 System Analysis and Design 3 cr

**Electives (7-9 credits):**
- COMPUTER 1130 Introduction to Computer Science 1 cr
- COMPUTER 1830 Microcomputer Applications 3 cr
- COMPUTER 2340 Programming in Visual Basic 3 cr
- COMPUTER 2830 Advanced Microcomputer Applications 3 cr
- COMPUTER 3530 System Development and Implementation 3 cr
- COMPUTER 3630 Database Design and Implementation 3 cr
- COMPUTER 3640 Client/Server Programming 3 cr
- COMPUTER 3930 CICS Application Programming 3 cr
- COMPUTER 4230 Applications in Information Systems 3 cr

For a stronger concentration in computer science, a student should take the required courses above plus one of the following options:

**Option 1:** COMPUTER 3530, COMPUTER 3630 or COMPUTER 3930 and COMPUTER 4230
**Option 2:** COMPUTER 3630 and COMPUTER 3640.

**Business and Economics with Vocational Business Studies Concentration**

Students from vocational-technical adult education schools and from unaccredited institutions who have done course work in a business program may transfer to UW-Platteville. They can combine their previous work with liberal and professional studies at this university to earn the baccalaureate degree. To graduate with a Bachelor of Science degree in business and economics, students must (1) complete all general university requirements, (2) complete the 60-credit program specified above for the comprehensive major and (3) earn in residence a minimum of 34 credits in the major area and 31 credits in liberal arts courses. The student, in consultation with the advisor, may pursue in-depth work in accounting, business administration or economics.

The vocational-technical background of each student will be evaluated on a course-by-course basis. Waivers and credits will be granted by the appropriate faculty, based upon transcripts, tests or other criteria. As a general policy, credits will not be granted for courses numbered 3000 and above, or for grades below “C.” However, up to 24 credits of the business and economics core and up to 15 credits of the general university requirements may be accepted.

**Comprehensive Social Sciences with a Concentration in Economics-Economics Education (Teaching)**

The College of Liberal Arts and Education offers a major for certification of social science teachers with an area concentration in economics. Students with a major in comprehensive social sciences with a concentration in economics-economics education will receive a Bachelor of Arts degree.

For more information, see the Social Sciences Comprehensive major.

**Economics Minor (24 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECONOMIC 2130</td>
<td>Principles of Macroeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECONOMIC 2230</td>
<td>Principles of Microeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECONOMIC 3330</td>
<td>Intermediate Microeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>ECONOMIC 3340</td>
<td>Intermediate Macroeconomics</td>
<td>3 cr</td>
</tr>
<tr>
<td>Electives in Economics</td>
<td>12 cr</td>
<td></td>
</tr>
</tbody>
</table>
Geography
www.uwplatt.edu/geography

Contact: J. Elmo Rawling
Office: 242 Gardner Hall
Phone: 608.342.1680
E-mail: rawlingj@uwplatt.edu

Professor: Richard A. Waugh

Associate Professors: H. Todd Stradford
Mari A. Vice
J. Elmo Rawling

Assistant Professor: Jennifer Mandel

Lecturers: Carol Bendorf
Richard Becker
Carrie Eaton
Jackson Zimmerman

Geography is the study of the Earth: its physical processes, peoples, societies and cultures. Geography is a “big picture” discipline that serves as an important connection among the social, physical and mathematical sciences as well as humanities. It incorporates aspects of many other fields such as geology, history, biology and anthropology. Given this, geographers are ideally suited to address some of the world’s most pressing problems such as addressing global climate change, assessing the impacts of social policies, mediating debates over land use and sustainable development and assessing the interactions between nature and society.

The Geography and Geology programs at UW-Platteville are housed within the Social Sciences Department. We offer a major and minor in Geography as well as a minor in Geology. Geography students explore the human and natural world through classroom, laboratory and field experiences, as well as through individual research, internship and attendance at professional meetings. They learn to use modern computer equipment, the latest software and databases. The geography student is creative, enjoys challenges, can learn through observation and research and enjoys the satisfaction of improving global conditions.

A major in Geography offers broad training in physical and human environments, on the major world regions, nature and society interactions, and geographic techniques. Upon graduation, geographers have diverse knowledge applicable to a wide range of careers. The largest employers of geographers with bachelor’s degrees are federal, state and local governmental agencies as well as educational systems. Geography offers important skills for careers in planning, market analysis, economic development, travel-tourism, teaching, criminal justice, agriculture, environmental studies, natural resource management, international affairs, spatial data analysis, cartography and Geographic Information Systems (GIS).

Mission Statement

The goal of this major is to train students to analyze global issues like a geographer, that is, to take the physical processes and/or human interactions of the Earth and integrate them over space and time. Geography will prepare students to use knowledge about global physical and human patterns and process them to critically analyze and solve current geographical issues, including global warming, conservation, globalization, terrorism and technology advances. This program fosters scientific, cultural and technological literacy’s that will prepare geography students to think and act with professional, personal, civic and social responsibility in the 21st century.

Student Learning Outcomes

Graduates will:
1. Recognize the unique subject and methods of geography, and be able to use geographical concepts contributing to the solution of societal and environmental problems.
2. Understand the processes and patterns of the physical world and how human actions impact and interact with natural systems.
3. Develop a perspective that allows them to understand spatial variation and diversity at global, regional and local scales.
4. Have the skills to read, interpret, use and make maps and be able to solve, and communicate spatial problems using geographic technologies.
5. Have the ability to conduct, process, prepare and present empirical geographic research at a fundamental level.
6. Have knowledge of the potential career opportunities for geographers.

General Requirements

Bachelor of Science Degree
Total for Graduation ..................................................... 120 credits
General Education ..................................................... 44-58 credits
Major Studies ............................................................ 38-40 credits

Students must have a cumulative grade point average of 2.50 within the major studies for graduation.

Bachelor of Arts Degree

In addition to the Bachelor of Science requirements, students must complete nine supplemental credits in a foreign language.

Geography Major (38-40 credits)

Required core courses (7 classes/20 credits):
GEOGRPHY 1010 Foundational Geographic Skills 1 cr
1 Regional Geography Course* 3 cr
1 Human Geography Course* 3 cr
1 Physical Geography Course* 4 cr
1 Environmental Geography Course* 3 cr
1 Geographic Techniques Course* 3 cr
GEOGRPHY 4030 Geography Seminar 3 cr

*Students may fulfill these requirements using any course in the appropriate focus area so long as they meet any applicable prerequisites or have permission from the instructor.

Additional geography courses in any area of focus (6 classes/16-18 credits):
### Physical Geography Focus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOGRPHY 1040</td>
<td>Planet Earth</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRPHY 1140</td>
<td>Global Landforms</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRPHY 1240</td>
<td>Weather and Climate</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRPHY 1360</td>
<td>Biogeography</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRPHY 1370</td>
<td>Global Vegetation</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3670</td>
<td>Coastal Ecosystems</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3560</td>
<td>Oceanography</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3840</td>
<td>Soil Geomorphology</td>
<td>4 cr</td>
</tr>
<tr>
<td>GEOGRPHY</td>
<td>Process Geomorphology</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

### Human Geography Focus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOGRPHY 1230</td>
<td>Survey of Cultural Geography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3030</td>
<td>Economic Geography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3170</td>
<td>Space, Place and Gender</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 4230</td>
<td>Political Geography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 4350</td>
<td>Development Geography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 4550</td>
<td>Process Geomorphology</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

### Nature and Society Focus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOGRPHY 3330</td>
<td>Environmental Conservation</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3850</td>
<td>Geography of the National Parks</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 4150</td>
<td>Climate Change</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Geographic Techniques Focus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOGRPHY 2230</td>
<td>GIS: Thematic Mapping</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3230</td>
<td>GIS: Vector Fundamentals</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3520</td>
<td>Remote Sensing and Photogrammetry</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3720</td>
<td>GIS: Digital Image Analysis</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 4330</td>
<td>GIS: Raster Fundamentals</td>
<td></td>
</tr>
</tbody>
</table>

### Regional Focus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOGRPHY 1330</td>
<td>World Regional Geography</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3130</td>
<td>Geography of the United States</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3350</td>
<td>Geography and Development of the Middle East</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3430</td>
<td>Geography of Africa</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3530</td>
<td>Topics in Regional Geography</td>
<td>2-3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3630</td>
<td>Geography of Latin America</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3730</td>
<td>Geography of Europe</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3930</td>
<td>Geography of Asia</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

### Field Experiences Focus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOGRPHY 2250</td>
<td>Tropical Marine Ecosystems</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3120</td>
<td>Geography of Wisconsin</td>
<td>3 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3750</td>
<td>Field Geography of the Western United States</td>
<td>1-4 cr</td>
</tr>
<tr>
<td>GEOGRPHY 3960</td>
<td>Geography of Japan</td>
<td>6 cr</td>
</tr>
<tr>
<td>GEOGRPHY 4760</td>
<td>Geography Field Study</td>
<td>1-8 cr</td>
</tr>
</tbody>
</table>

### Electives (only 6 credits count toward major):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGSCI 2230</td>
<td>Soils</td>
<td></td>
</tr>
<tr>
<td>AGSCI 3330</td>
<td>Soil Morphology and Classification</td>
<td></td>
</tr>
<tr>
<td>BIOLOGY 2420</td>
<td>Fundamentals of Biological Investigations</td>
<td></td>
</tr>
<tr>
<td>ENGLISH 3000</td>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>PHYSED 1310</td>
<td>Scuba Diving</td>
<td></td>
</tr>
</tbody>
</table>

### Geography Minor (24 credits)

The Geography minor is designed to offer broad training in physical and human geography content and techniques giving students diverse knowledge applicable to a wide range of careers. Students will explore the human and natural world through classroom, laboratory and field experiences. This minor offers important skills for careers in planning, travel-tourism, teaching, criminal justice, agriculture, natural resource management and international affairs.

### Student Learning Outcomes

**Graduates will:**

1. Recognize the unique subject and methods of geography
2. Understand the processes and patterns of the physical world and how human actions impact and interact with natural systems
3. Develop a perspective that allows them to understand spatial variation and diversity at global, regional and local scales
4. Be able to use geographical concepts in contributing to the solution of societal and environmental problems

**Required core courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOGRPHY 1010</td>
<td>Foundational Geographic Skills</td>
<td>1 cr</td>
</tr>
<tr>
<td>1 Course from Physical Geography Focus</td>
<td></td>
<td>4 cr</td>
</tr>
<tr>
<td>1 Course from Human Geography Focus</td>
<td></td>
<td>3 cr</td>
</tr>
<tr>
<td>Additional Geography Courses</td>
<td></td>
<td>16 cr</td>
</tr>
</tbody>
</table>
About the Geology Program and Minor

A minor in Geology demonstrates the relationship between the earth sciences and other fields. It provides students in reclamation, biology, engineering and other allied areas with a sound basis in geology essential for professional work. Practical field experience emphasizes biological evolution, geological history and environmental problems.

Geology Minor (24 credits)

Introductory course in Geology (3-4 credits):
- GEOLOGY 1040 General Geology 4 cr
- GEOLOGY 1140 Physical Geology 4 cr
- GEOLOGY 3130 Engineering Geology 3 cr

Required courses (13 credits):
- GEOLOGY 3040 Mineralogy and Lithology 4 cr
- GEOLOGY 3230 Sedimentary Geology 3 cr
- GEOLOGY 3830 Field Methods and Mapping 3 cr
- GEOLOGY 4030 Economic Geology 3 cr

Electives (8-9 credits):
- AGSCI 2230 Soils 3 cr
- GEOGRAPHY 2230 Cartography and Graphics 3 cr
- GEOGRAPHY 3230 Geographic Information Systems 3 cr
- GEOLOGY 3430 Hydrogeology 3 cr
- GEOGRAPHY 3520 Air Photo Interpretation 3 cr
- GEOGRAPHY 3720 Remote Sensing 3 cr
- GEOLOGY 4120 Topical Seminar 2-3 cr
- GEOLOGY 4540 Regional Geomorphology 4 cr
- GEOLOGY 4760 Field Excursion 1-8 cr

About the Environmental Science and Minor

The Environmental Science minor is an interdisciplinary program designed to give students, particularly those in the natural sciences, a broad understanding of the relationship of humans to the environment and the processes that occur in the natural environment. Environmental Science has become an essential component of a wide variety of fields and in a variety of careers, and its importance will only increase in the future. This minor will help prepare students to respond to the demands of environmental understanding increasingly expected of 21st century people.

Environmental Science Minor (24 credits)

Requirements (18 credits)

Core courses (9 credits):
- GEOGRAPHY 3330 Environmental Conservation 3 cr
- BIOLOGY 3450 Ecology and Evolution* 3 cr
- CRIMLJUS Environmental Law 3 cr

One physical processes course from (4 credits):
- GEOGRAPHY 1140 Global Landforms 4 cr
- GEOLOGY 1140 Physical Geology 4 cr

One chemistry course from (5 credits):
- CHEMISTRY 1050 General Chemistry 5 cr
- CHEMISTRY 1140/ General Chemistry Sequence 5 cr
- 1240
- CHEMISTRY 1450 Chemistry for Engineers

Electives (minimum 6 credits):
- GEOGRAPHY 1240 Weather and Climate 4 cr
- GEOGRAPHY 1360 Biogeography 4 cr
- GEOGRAPHY 1370 Global Vegetation 4 cr
- GEOGRAPHY 3230 GIS: Vectors and Fundamentals 3 cr
- GEOGRAPHY 3540 Oceanography 3 cr
- GEOGRAPHY 3670 Coastal Ecosystems 3 cr
- GEOGRAPHY 3840 Soil Geomorphology 4 cr
- GEOGRAPHY 4760 Field Geography of the Western United States 1-4 cr
- PHLSPHY 2540 Science, Technology and Ethics 3 cr
- AGSCI 2230 Soils 3 cr
- GEOLOGY 3430 Hydrology 3 cr
- CHEMISTRY 3130 Environmental Chemistry 3 cr
- BIOLOGY 2450 Fungi, Algae and Bryophytes 4 cr
- BIOLOGY 2640 Invertebrate Zoology 4 cr
- BIOLOGY 3030 Ornithology 3 cr
- BIOLOGY 3110 Fresh Water Biology 3 cr
- BIOLOGY 3230 Mammalogy 3 cr
- BIOLOGY 3340 Entomology 4 cr
- BIOLOGY 3460 Ecological Methods and Research** 3 cr
- BIOLOGY 3650 Plant Communities of Wisconsin 4 cr
- BIOLOGY 3660 Animal Communities of Wisconsin 3 cr
**Geographic Information Systems Minor (24 credits)**

The Minor in Geographic Information Systems (GIS) prepares students for current modern trends in geospatial technology, computerized mapping, digital image processing and spatial analysis. The GIS Minor requires one course in Computer Science (COMPUTER 1130), four courses in GIS and Remote Sensing, and six hours of upper division coursework in selected classes, either in geosciences, computer science or business.

The GIS Minor incorporates dynamic changes in current advances in spatial sciences and technology. The students that complete a GIS Minor significantly enhance their employment opportunities, especially in environmental consultation agencies, mapping technology industries and surveying. The GIS Minor pertains to any natural resource field such as geology and biology as well as social studies and business. A GIS Minor combined with a computer science major is currently one of the most employable fields in geospatial analysis.

**Required core courses:**
- COMPUTER 1130 Introduction to Programming 3 cr
- GEOGRAPHY 2230 GIS: Thematic Mapping 3 cr
- GEOGRAPHY 3230 GIS: Vector Fundamentals 3 cr
- GEOGRAPHY 3720 GIS: Digital Image Analysis 3 cr
- GEOGRAPHY 4330 GIS: Raster Fundamentals 3 cr

**Electives (6 credits):**
- MATH 1830 Elementary Statistics 3 cr
- GEOGRAPHY 3520 Remote Sensing and Photogrammetry 3 cr
- GEOGRAPHY 3560 Oceanography 4 cr
- GEOGRAPHY 3670 Coastal Ecosystems 3 cr
- GEOGRAPHY 3840 Soil Geomorphology 4 cr
- GEOGRAPHY 4120 Topical Seminar 2-3 cr
- GEOGRAPHY 4660 Cooperative Field Experience 1-8 cr

* Requires BIOLOGY 1650 Unity of Life and BIOLOGY 1750 Diversity of Life as prerequisites.

** Requires BIOLOGY 2420 Fundamentals of Biological Investigation as prerequisite.

---

**About the History Program and Major**

The Department of Social Sciences offers a major and minor in history. History is the systematic study of the past. History is the foundation discipline within the liberal arts and the source of the social sciences. Understanding the past helps us understand human nature, broadens our perspectives, refines our judgments and provides insight into contemporary issues. The study of history is basic to our personal uniqueness, our professional identity and our civic lives.

Students of history learn important skills. The study of history requires students to read, write, analyze and use logic. Students learn to do research; to assess arguments; to interpret economic, social, political, cultural and technological change in a variety of contexts. These skills are valuable in many industries.

History majors can find work in many fields. Some are directly related to the subject matter of history, such as museums and archive work, teaching, documentary film or historical publishing. Others use the skills that the study of history cultivates. History is a liberal arts degree that provides the basis for work in business, advertising, journalism, public relations, public administration, planning and research and professional fields, such as law.

**Mission**

The History Program enables its majors to become broader in perspective, more literate, intellectually more astute, ethically more sensitive, and to participate wisely in society as competent professionals and knowledgeable citizens. Our students understand the complexity of the factors and forces that can cause historical change, and they are able to analyze and evaluate historical narratives that explain change. Students develop skills in reading, writing, analysis, and logic. History majors learn to do research, to assess arguments, to interpret economic, social, political, cultural and technological change in a variety of contexts.
Goals and Objectives
Students will:
1. write historical essays with a clear and focused thesis, developed by a logical argument, and substantiated with factual detail;
2. undertake historical research projects based on primary and secondary sources in both print and electronic formats, including the formulation of historically significant questions, gathering appropriate sources, and the application of appropriate methods of analysis and synthesis; and also to
3. critically analyze works of history by demonstrating an understanding of a work's assumptions, method, sources, and point of view and evaluating its argument.

General Requirements
Bachelor of Arts Degree
Total for Graduation ..................................................... 120 credits
General Education ..................................................... 44-58 credits
Major Studies ................................................................. 36 credits
Students must have a cumulative grade point average of 2.50 within the major studies for graduation.

History Major (36 credits)
Required courses (12 credits):
HISTORY 1010 World Civilization I 3 cr
HISTORY 1020 World Civilization II 3 cr
HISTORY 1330 U.S. History to 1877 3 cr
HISTORY 1430 U.S. History since 1877 3 cr
U.S. History courses (6 credits):
HISTORY 3010 Race, Gender and U.S. Labor History 3 cr
HISTORY 3080 American Military History 3 cr
HISTORY 3120 American Colonial History 3 cr
HISTORY 3130 The New Nation 3 cr
HISTORY 3140 The Civil War and Reconstruction 3 cr
HISTORY 3150 Gilded Age and Progressive Era 3 cr
HISTORY 3230 The West in American History 3 cr
HISTORY 3240 African-American History 1619 to Present 3 cr
HISTORY 3320 The History of Wisconsin 3 cr
HISTORY 3400 The Vietnam War 3 cr
HISTORY 3430 Twentieth Century America 3 cr
HISTORY 3450 U.S. Foreign Relations 3 cr
HISTORY 3480 The United States Since 1945 3 cr
HISTORY 3520 American Women 3 cr
HISTORY 4230 Issues in History (U.S. topics) 1-3 cr
Non-Western courses (1-3 credits):
HISTORY 3070 Latin American History 3 cr
HISTORY 3640 Imperialism in Africa and Asia 3 cr
HISTORY 3920 Modern Middle East 3 cr
HISTORY 3950 Modern Japan 3 cr
HISTORY 3970 Modern China 3 cr
HISTORY 4110 Russia to 1856 3 cr
HISTORY 4120 Modern Russia 3 cr
HISTORY 4230 Issues in History (European topics) 3 cr
Choose three elective courses from the above lists.

Students may also enroll in:
HISTORY 4660 Cooperative Field Experience 1-8 cr
HISTORY 4720 Independent Research in History 1-3 cr
History majors must demonstrate competence in writing. See the department contact person for procedures.

Honors Program
History majors with at least a 3.75 GPA in history and 3.50 overall may be invited to complete an honors research paper. Students wishing to do honors research should consult with their advisors.

History Minor (24 credits)
Required courses (12 credits):
HISTORY 1010 World Civilization I 3 cr
HISTORY 1020 World Civilization II 3 cr
HISTORY 1330 U.S. History to 1877 3 cr
HISTORY 1430 U.S. History since 1877 3 cr
From the courses listed under History Major above, choose: one U.S. History course one European History course one non-western course, and one other course as elective
INTERNATIONAL STUDIES
www.uwplatt.edu/socialsci/international/international.html

Contact: Susan C. Morris
Office: 138 Gardner Hall
Phone: 608.342.1809
E-mail: morrissu@uwplatt.edu

About the International Studies Program and Major

International studies is available as a comprehensive interdisciplinary major and a minor offered by the College of Liberal Arts and Education in the Department of Social Sciences. The international studies major focuses on the global perspective in education. Through a cross-national approach, the major is designed to make visible and explicit the interdependence that has been created by economic, technological and communications development in the contemporary world.

Students in international studies must be self-directed and confident in their ability to plan their course work to match their anticipated professional goals. This major is designed to prepare students to work effectively in the increasingly complex world. The program offers considerable flexibility for students to develop areas of specialization. Students are able to draw upon the offerings of other departments at this university. It is recommended that all majors study a foreign language and, if possible, complete a minor in that language. Also study abroad programs are available and recommended for students in this major.

Mission

The International Studies major provides an understanding of transnational and intercultural relations through interdisciplinary work across departments in the social sciences, humanities, and fine arts. It includes curricular, experiential and skills components which enable students to engage in personal development, academic commitment, intercultural development in the form of understanding cultural values of different cultures, and career development.

Goals and Objectives

Graduates will:
1. exhibit familiarity with geographical, cultural, political, economic, literary and historical approaches to global issues;
2. develop working knowledge of the methodologies central to the participating social science and humanities courses;
3. undertake an international experience through an appropriate study abroad program; and
4. demonstrate competency in a second language, at least equivalent to three courses of college-level work.

General Requirements

Bachelor of Arts Degree

Total for Graduation..................................................120 credits
General Education......................................................44-58 credits
Major Studies.................................................................60 credits
Foreign Language Minor (suggested) .........................24 credits

International Studies

Comprehensive Major (60 credits)

The International Studies major has a core requirement of 15 credit hours. Students must choose between Track I or Track II. The list of International Education courses is found below:

Required courses (15 credits):
HISTORY 1020 World Civilization II 3 cr
GEOGRPHY 1330 World Regional Geography 3 cr
ECONOMIC 2130 Principles of Macroeconomics 3 cr
POLISCI 1330 International Relations 3 cr
SOCIOLGY 2130 Cultural Anthropology 3 cr

Choose either track:

Track I
International Education Courses (33 credits) from the list below
Foreign Language (12 credits in one language)

Track II
Foreign Language (24 credits): French, Spanish or German minor
Area Studies (21 credits): Not limited to one area

A semester abroad is strongly recommended. Most classes taken abroad will count toward the International Studies Major.

Electives (33 credits):
AGINDUS 2330 World Population, Food and Resources 3 cr
ART 3530 Art History V: Far Eastern Art 3 cr
BUSADMIN 1300 Global Business 3 cr
ECONOMIC 3630 Comparative Economic Systems 3 cr
ENGLISH 2640 World Literature I 3 cr
ENGLISH 2650 World Literature II 3 cr
ENGLISH 3830 The World Novel 3 cr
GEOGRPHY 1230 Survey of Cultural Geography 3 cr
GEOGRPHY 1330 World Regional Geography 3 cr
GEOGRPHY 3030 Economic Geography 3 cr
GEOGRPHY 3430 Geography of Africa 3 cr
GEOGRPHY 3530 Topics in Regional Geography 2-3 cr
GEOGRPHY 3630 Geography of Latin America 3 cr
GEOGRPHY 3730 Geography of Europe 3 cr
GEOGRPHY 3930 Geography of Asia 3 cr
GEOGRPHY 3960 Geography of Japan 6 cr
GEOGRPHY 4230 Political Geography 3 cr
HISTORY 1020 World Civilization II 3 cr
HISTORY 3070 Latin American History 3 cr
HISTORY 3640 Imperialism in Africa and Asia 3 cr
HISTORY 3920 Modern Middle East 3 cr
HISTORY 3950 Modern Japan 3 cr
HISTORY 3970 Modern China 3 cr
HISTORY 4110 Russia to 1856 3 cr
HISTORY 4120 Modern Russia 3 cr
PHLSPHY 2230 Contemporary Worldviews 3 cr
POLISCI 1330 International Relations 3 cr
POLISCI 2430 Comparative Politics 3 cr
POLISCI 3340 Modern Japan 3 cr
POLISCI 3350 Modern China 3 cr
POLISCI 3720 Politics of the Global Economy 3 cr
SOCIOLGY 1130 Introductory Anthropology 3 cr
SOCIOLGY 2130 Cultural Anthropology 3 cr
SPEECH 2300 Introduction to Intercultural Communication 3 cr

162
Students who major in international studies must complete at least two years of a foreign language, and a foreign language minor is suggested.

The major requirements also include a written competency certification developed by the department. Please check at the department office for details.

A semester or year in a foreign study program, which is strongly recommended, is an ideal way to fulfill Parts Three and Four of the major.

**Foreign Study Programs**

International Studies majors are encouraged to give consideration to a semester or year abroad in one of our foreign study locations. A semester abroad is an ideal way to complete the third part of the major because a student actually lives in the geographical region of specialization and studies aspects of the culture. With the exception of the programs in Avignon and Puebla, the language of instruction is English. In all but these two programs, fluency in a foreign language is not a prerequisite to participation. All participants study the language of the country while they are living there. The combination of classroom work and everyday exposure to and use of the language results in a degree of fluency by the end of the semester or year abroad.

Our primary study abroad locations include London, England; Aix-en-Provence and Avignon, France; Heidelberg, Germany; Dublin and Limerick, Ireland; Lisbon, Portugal; Seville, Spain; and Puebla, Mexico. In addition, programs in China, Ecuador, Jamaica, Japan, Greece and Italy are available through consortial arrangements. Detailed information about each program is available from the Institute for Study Abroad Programs located in Royce Hall, Room 111, phone 608.342.1726.

**International Studies Minor (24 credits)**

In our global society, employers increasingly expect graduates to possess an understanding of other nations and cultures. The International Studies minor provides students with the opportunity to study international topics from an interdisciplinary perspective. Students pursuing the minor in International Studies must be self-directed and able to plan course work to complement their major field of study. Students pursue 12 credits foreign language in one language and complete 12 credits from the list of courses fulfilling the “International Perspective” University Requirement.

**Political Science**

[www.uwplatt.edu/socialsci/polsci/polsci.html](http://www.uwplatt.edu/socialsci/polsci/polsci.html)

**Contact:** John Rink  
**Office:** 140 Gardner Hall  
**Phone:** 608.342.1795  
**E-mail:** rink@uwplatt.edu

**Professors:**  
Rosalyn Broussard  
John R. Rink

**Assistant Professor:**  
Susan C. Morris

**Lecturer:**  
Scott Nikolai

**About the Political Science Program and Major**

The Department of Social Sciences offers a major and minor in Political Science. Political science is the study of governmental institutions and decision-making in the political arena. Political science focuses on political systems by looking at American institutions, public law, public administration, public policy, political theory, political behavior, comparative politics, and international relations. Political science is a discipline in the social sciences and part of the liberal arts approach to education.

Students in political science learn skills in writing and critical thinking. They are asked to learn to question, analyze and consider solutions to political problems. Research abilities are important for future individual and professional success.

Students seeking employment rather than graduate or professional (law) school should consider courses in administration and management. Those planning on graduate school should take political theory courses and research methods.

**Mission**

The Political Science Program enables its majors to improve substantially their understanding of themselves and the world. The department seeks to educate students to have knowledge and appreciation of politics, the development of political thought and governance, and the essential knowledge of their chosen fields. It attempts to enable students to live more meaningfully in the world. The department seeks to prepare its graduates for employment and/or advanced study, and to stimulate students to anticipate their future roles as professionals and citizens.

**Goals and Objectives**

**Graduates will:**

1. demonstrate an understanding of the origins, development, structure and operation of American government with emphasis on the roles of the executive, legislative and judicial branches and their political actors;
2. develop an ability to explain the linkages of individuals and groups to the political process, the structure and functions of public policies, the decision making process and follow national and world issues intelligently; and
3. demonstrate a knowledge and appreciation of political thought and social research methods.
General Requirements
Bachelor of Arts Degree
Total for Graduation ..................................................... 120 credits
General Education ..................................................... 44-58 credits
Major Studies ................................................................. 36 credits

Political Science Major (36 credits)

Required courses (12 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLISCI 1230</td>
<td>Introduction to American Government</td>
<td>3 cr</td>
</tr>
<tr>
<td>and either</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLISCI 1130</td>
<td>Introduction to Politics</td>
<td>3 cr</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLISCI 1330</td>
<td>International Relations</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Electives (24 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLISCI 1330</td>
<td>International Relations</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 1430</td>
<td>Current Issues and Democracy</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 1530</td>
<td>Introduction to Public Policy</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 2430</td>
<td>Comparative Politics</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 2940</td>
<td>Political Economy, Race, Gender and Ethnicity</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3230</td>
<td>Introduction to Public Administration</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3320</td>
<td>Congressional Politics</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3330</td>
<td>American Political Parties</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3340</td>
<td>Modern Japan</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3350</td>
<td>Modern China</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3520</td>
<td>Judicial Process</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3530</td>
<td>State and Local Government</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3720</td>
<td>Politics of the Global Economy</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3730</td>
<td>Ethnic Rights and Politics</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 3830</td>
<td>Civil Liberties</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 4120</td>
<td>Modern Russia</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 4420</td>
<td>Constitutional Law</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 4660</td>
<td>Cooperative Field Experience</td>
<td>1-8 cr</td>
</tr>
<tr>
<td>POLISCI 4720</td>
<td>Study and Research in Political Science</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>POLISCI 4760</td>
<td>Seminar in Selected Topics in Political Science</td>
<td>1-3 cr</td>
</tr>
</tbody>
</table>

Political science majors must demonstrate a writing proficiency. Please see the department contact person for the requirements.

Political Science Minor (24 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLISCI 1130</td>
<td>Introduction to Politics</td>
<td>3 cr</td>
</tr>
<tr>
<td>POLISCI 1230</td>
<td>Introduction to American Government</td>
<td>3 cr</td>
</tr>
<tr>
<td>Elective Courses</td>
<td></td>
<td>18 cr</td>
</tr>
</tbody>
</table>

The Social Sciences Comprehensive Program and Major

Note: some emphases are administered by departments other than the Department of Social Sciences. For simplicity, however, all emphases and their requirements are listed in this section.

Economics Emphasis

<table>
<thead>
<tr>
<th>Contact</th>
<th>J. Elmo Rawling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>153 Gardner Hall</td>
</tr>
<tr>
<td>Phone</td>
<td>608.342.1680</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:rawlingj@uwplatt.edu">rawlingj@uwplatt.edu</a></td>
</tr>
</tbody>
</table>

History Emphasis

<table>
<thead>
<tr>
<th>Contact</th>
<th>Nancy Turner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>332 Warner Hall</td>
</tr>
<tr>
<td>Phone</td>
<td>608.342.1789</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:turnern@uwplatt.edu">turnern@uwplatt.edu</a></td>
</tr>
</tbody>
</table>

Geography Emphasis

<table>
<thead>
<tr>
<th>Contact</th>
<th>J. Elmo Rawling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>239 Gardner Hall</td>
</tr>
<tr>
<td>Phone</td>
<td>608.342.1680</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:rawlingj@uwplatt.edu">rawlingj@uwplatt.edu</a></td>
</tr>
</tbody>
</table>

Psychology Emphasis

<table>
<thead>
<tr>
<th>Contact</th>
<th>Elizabeth Gates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>228 Warner Hall</td>
</tr>
<tr>
<td>Phone</td>
<td>608.342.1723</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:gatese@uwplatt.edu">gatese@uwplatt.edu</a></td>
</tr>
</tbody>
</table>

The Social Sciences Comprehensive major includes course work in economics, geography, history, political science, sociology and psychology. A minor in economics, geography, history or psychology is required; this is considered the area of emphasis. Students who wish a broad liberal arts program will find it within the Social Sciences Comprehensive major.

Students who plan to teach will also find the Social Sciences Comprehensive major useful. (Additional information appears below.)
Mission

Our program provides majors with a broad grounding in the Social Sciences and the equivalent of a minor in History.

“Social sciences” is not a discipline, in itself, but combines many disciplines. Therefore it provides no unique skills and concepts separate from those offered by Economics, History, Psychology, Political Science, and Sociology.

In addition to the broad liberal arts education provided by each of the component disciplines, the Social Sciences Comprehensive Major with an Emphasis in History prepares social sciences instructors to teach in the public school system.

Goals and Objectives

Goals and objectives specific to each discipline are assessed as part of the assessment of the individual disciplines. The unique goal of the Social Sciences Comprehensive Major with an Emphasis in History is to provide a broad knowledge of Social Science and History facts and concepts.

General Requirements

Bachelor of Arts Degree

Total for Graduation.................................................................120 credits
General Education.................................................................44-58 credits
Major Studies...........................................................................varies

Students must have a cumulative grade point average of 2.50 within the major studies for graduation.

Economics Emphasis (66 credits)

Economics required courses (15 credits):
- ECONOMIC 2130 Principles of Macroeconomics 3 cr
- ECONOMIC 2230 Principles of Microeconomics 3 cr
- ECONOMIC 3330 Intermediate Microeconomic Analysis 3 cr
- ECONOMIC 3340 Intermediate Macroeconomic Analysis 3 cr
- ECONOMIC 3630 Comparative Economic Systems 3 cr

Additional courses (3 credits):
- ECONOMIC 2410 Interpretation of Business and Economic Data 3 cr
- ECONOMIC 3220 Introduction to Managerial Economics 3 cr
- ECONOMIC 3420 Consumer Economics 3 cr

Students must also choose two elective courses. The following are strongly recommended:
- ECONOMIC 3210 History of Economic Thought 3 cr
- ECONOMIC 3420 Consumer Economics 3 cr

Geography required courses (12 credits):
- GEOGRAPHY 1330 World Regional Geography 3 cr
- GEOGRAPHY 3030 Economic Geography 3 cr
- GEOGRAPHY 3330 Environmental Conservation 3 cr

Three additional credits in Geography

History required courses (12 credits):
- HISTORY 1010 World Civilization I 3 cr
- HISTORY 1020 World Civilization II 3 cr
- HISTORY 1330 U.S. History to 1877 3 cr
- HISTORY 1430 U.S. History since 1877 3 cr

Political Science required courses (12 credits):
- POLISCI 1230 Introduction to American Government 3 cr
- POLISCI 1330 International Relations 3 cr

Psychology required courses (6 credits):
- PSYCHLGY 1130 General Psychology 3 cr
- PSYCHLGY 3530 Social Psychology 3 cr

Sociology required courses (6 credits):
- SOCIOLOGY 1030 Principles of Sociology 3 cr
- SOCIOLOGY 2330 Contemporary Social Problems 3 cr

Geography Emphasis (63 credits)

Geography required courses (25 credits):
- GEOGRAPHY 1040 Survey of Physical Geography 4 cr
- GEOGRAPHY 1140 Physical Geography: Geomorphology 4 cr
- GEOGRAPHY 1240 Physical Geography: Weather and Climate 4 cr
- GEOGRAPHY 1330 World Regional Geography 3 cr
- GEOGRAPHY 2230 Cartography and Graphics 3 cr
- GEOGRAPHY 3030 Economic Geography 3 cr
- GEOGRAPHY 4030 Seminar in Geographic Development and Methodology 3 cr
- GEOGRAPHY XXXX Additional Geography courses 5 cr

Students planning to teach must take GEOGRAPHY 3330 Environmental Conservation and are strongly urged to take GEOGRAPHY 3120 Geography of Wisconsin

History required courses (15 credits):
- HISTORY 1010 World Civilization I 3 cr
- HISTORY 1020 World Civilization II 3 cr
- HISTORY 1330 U.S. History to 1877 3 cr
- HISTORY 1430 U.S. History since 1877 3 cr
- HISTORY XXXX Additional History course 3 cr

Economics required courses (6 credits):
- ECONOMIC 2130 Principles of Macroeconomics 3 cr
- ECONOMIC 2230 Principles of Microeconomics 3 cr

Political Science required courses (6 credits):
- POLISCI 1230 Introduction to American Government 3 cr
- POLISCI 1330 International Relations 3 cr

Psychology required courses (6 credits):
- PSYCHLGY 1130 General Psychology 3 cr
- PSYCHLGY 3530 Social Psychology 3 cr

Sociology required courses (6 credits):
- SOCIOLOGY 1030 Principles of Sociology 3 cr
- SOCIOLOGY 2330 Contemporary Social Problems 3 cr
History Emphasis (60 credits)

**History required courses (24 credits):**

- HISTORY 1010 World Civilization I 3 cr
- HISTORY 1020 World Civilization II 3 cr
- HISTORY 1330 U.S. History to 1877 3 cr
- HISTORY 1430 U.S. History since 1877 3 cr

12 additional credits: two U.S. history, one European history, one non-Western History; 36 credits from the following list (30 are required, 6 are electives)

**Geography required courses (6 credits):**

- GEOGRPHY 1330 World Regional Geography 3 cr
- GEOGRPHY 3330 Environmental Conservation 3 cr

**Possible elective (3 credits):**

- GEOGRPHY 1230 Survey of Cultural Geography 3 cr
- GEOGRPHY 3030 Economic Geography 3 cr
- GEOGRPHY 4530 Historical Geography of the United States 3 cr

**Economics required courses (6 credits):**

- ECONOMIC 2130 Principles of Macroeconomics 3 cr
- ECONOMIC 2230 Principles of Microeconomics 3 cr

**Possible elective (3 credits):**

- ECONOMIC 2260 Economics and Western History II 3 cr
- ECONOMIC 4930 Senior Seminar 3 cr

**Political Science required courses (6 credits):**

- POLISCI 1130 Introduction to Politics 3 cr
- POLISCI 1230 Introduction to American Government 3 cr

**Possible elective (3 credits):**

- POLISCI 1330 International Relations 3 cr
- POLISCI 2430 Comparative Politics 3 cr

**Psychology required courses (6 credits):**

- PSYCHLGY 1130 General Psychology 3 cr
- PSYCHLGY 3530 Social Psychology 3 cr

**Possible elective (3 credits):**

- PSYCHLGY 4430 Abnormal Psychology 3 cr

**Sociology required courses (6 credits):**

- SOCIOLOGY 1030 Principles of Sociology 3 cr
- SOCIOLOGY 1130 Introduction to Anthropology 3 cr

**Possible elective (3 credits):**

- SOCIOLOGY 2130 Cultural Anthropology 3 cr
- SOCIOLOGY 2330 Contemporary Social Problems 3 cr
- SOCIOLOGY 3230 Human Relations 3 cr

Psychology Emphasis (69 Credits)

**Psychology required courses (24 credits):**

- PSYCHLGY 1130 General Psychology 3 cr
- PSYCHLGY 2230 Introduction to Experimental Psychology 3 cr
- PSYCHLGY 3130 Child Psychology 3 cr
- PSYCHLGY 3230 Adolescent Psychology 3 cr
- PSYCHLGY 4030 Theories of Personality 3 cr
- PSYCHLGY XXXX Additional Psychology courses 12 cr

**Geography required courses (12 credits):**

- GEOGRPHY 1330 World Regional Geography 3 cr
- GEOGRPHY 3030 Economic Geography 3 cr
- GEOGRPHY 3330 Environmental Conservation 3 cr
- GEOGRPHY XXXX Additional Geography courses 3 cr

**History required courses (15 credits):**

- HISTORY 1010 World Civilization I 3 cr
- HISTORY 1020 World Civilization II 3 cr
- HISTORY 1330 U.S. History to 1877 3 cr
- HISTORY 1430 U.S. History since 1877 3 cr
- HISTORY XXXX Additional History course 3 cr

**Economics required courses (6 credits):**

- ECONOMIC 2130 Principles of Macroeconomics 3 cr
- ECONOMIC 2230 Principles of Microeconomics 3 cr

**Political Science required courses (6 credits):**

- POLISCI 1130 Introduction to Politics 3 cr
- or
- POLISCI 1230 Introduction to American Government 3 cr
- POLISCI 1330 International Relations 3 cr

**Sociology required courses (6 credits):**

- SOCIOLOGY 1030 Principles of Sociology 3 cr
- SOCIOLOGY 2330 Contemporary Social Problems 3 cr

Social Sciences Comprehensive majors not in education must demonstrate competence in writing. See the department contact person for procedures.

Students planning to teach may want to choose a Social Sciences minor.

Social Sciences Minor (30 credits)

**History required courses (12 credits):**

- HISTORY 1010 World Civilization I 3 cr
- HISTORY 1020 World Civilization II 3 cr
- HISTORY 1330 U.S. History to 1877 3 cr
- HISTORY 1430 U.S. History since 1877 3 cr

**Geography required courses (3 credits):**

- GEOGRPHY 1330 World Regional Geography 3 cr

Note: Geography 3330, Environmental Conservation is a DPI GER requirement for education majors, but it does not count toward the Social Sciences Minor.
Economics required course (3 credits):
ECONOMIC 2130 Principles of Macroeconomics 3 cr

Political Science required course (3 credits):
POLISCI 1130 Introduction to Politics 3 cr

Note: POLISCI 1230 Introduction to American Government is a DPI GER requirement for Education majors, but it does not count toward this Social Sciences minor.

Sociology required course (3 credits):
SOCIOLOGY 1030 Principles of Sociology 3 cr
SOCIOLOGY 1130 Introductory Anthropology 3 cr
SOCIOLOGY 2130 Cultural Anthropology 3 cr

Psychology required course (3 credits):
PSYCHLGY 1130 General Psychology 3 cr

Note: PSYCHLGY 3530 Adolescent Psychology can be taken to satisfy GER requirements for Education majors, but it does not count toward the Social Sciences minor.

Students who complete either the Social Sciences Comprehensive major with an Emphasis in History or the History major and the Social Sciences Comprehensive minor, will be qualified to teach history and social studies courses in middle school and high school. Students who complete sequences of courses in the specific disciplines listed below may be licensed to teach those specific disciplines in middle and high school.

ECONOMICS
ECONOMIC 2130 Principles of Macroeconomics
ECONOMIC 2230 Principles of Microeconomics
ECONOMIC 3530 Economic History of the United States

GEOGRAPHY
GEOGRPHY 1230 Cultural Geography
GEOGRPHY 1330 World Regional Geography
GEOGRPHY 2230 Cartography and Graphics
GEOGRPHY 3030 Economic Geography
or GEOGRPHY 4230 Political Geography
or GEOGRPHY 4530 Historical Geography

POLITICAL SCIENCE
POLISCI 1130 Introduction to Politics
POLISCI 1230 Introduction to American Government
POLISCI 1330 International Relations
POLISCI 2430 Comparative Politics

PSYCHOLOGY
PSYCHLGY 1130 General Psychology
PSYCHLGY 3230 Adolescent Psych
PSYCHLGY 4430 Abnormal Psychology

SOCIOLOGY
SOCIOLOGY 1030 Principles of Sociology
SOCIOLOGY 2230 Women, Sex Roles, and Society
SOCIOLOGY 2330 Contemporary Social Problems
SOCIOLOGY 3130 Social Change

Sociology Minor (24 credits)
The sociology minor requires a minimum of 24 credits including no fewer than 12 credits at the 3000 level or above.
SOCIOLOGY 1030 Principles of Sociology 3 cr
SOCIOLOGY 1130 Introductory Anthropology 3 cr
SOCIOLOGY 1230 Marriage and Family 3 cr
SOCIOLOGY 2130 Cultural Anthropology 3 cr
SOCIOLOGY 2230 Women, Sex Roles and Society 3 cr
SOCIOLOGY 2330 Contemporary Social Problems 3 cr
SOCIOLOGY 3130 Social Change 3 cr
SOCIOLOGY 3230 Human Relations 3 cr
SOCIOLOGY 3330 Crime and Delinquency 3 cr
SOCIOLOGY 3430 Social Research 3 cr
SOCIOLOGY 3530 Rural Sociology 3 cr
SOCIOLOGY 3630 Sociology of the Family 3 cr
SOCIOLOGY 3930 Topics in Sociology 1-3 cr
SOCIOLOGY 4030 Social Organizations 3 cr
SOCIOLOGY 4730 Individual Study 1-3 cr
About the Department and Minor

The Women's Studies Program Council includes the following faculty and staff, plus one to two student members selected in the fall of each academic year.

- Carl Allsup: Ethnic Studies
- Laura Beadling: English
- Linda Bernhardt: Psychology
- Jackie Bodden: Women's Studies
- Rosalyn Broussard: Political Science
- Teresa Burns: English
- Martha Drummond: English
- Pat Foster: Women's Center
- Karen Gagne: Social Sciences
- Valerie Gill-Mast: Psychology
- Melissa Gormley: Social Sciences
- Keith Hale: English
- Linda James: Art
- Rea Kirk: Education
- Mary Lenzi: Philosophy
- Scott Nikolai: Political Science
- Florence Omachonu: Education
- Amy Parsons: English
- Regina Pauly: Karrmann Library
- Adam Stanley: History/Political Science
- Vicki Suhr: Education
- Kathleen Tigerman: English
- Amanda Tucker: English
- Nancy Turner: History
- Laura Wendoff: English
- Mary Rose Williams: Communication Technology

The Women's Studies Program creates new dimensions in the educational curriculum by expanding students' knowledge and awareness of women's experiences in as many areas as possible.

Women's Studies emphasizes the contributions of women and investigates the ways in which societal misconceptions of both sexes have been reflected in the traditional curriculum. This interdisciplinary academic field examines from a feminist perspective the challenges women in particular face. Thus, Women's Studies ultimately provides new insights for individuals seeking to improve the quality of their own lives and of the society in which they live.

The Women's Studies Program seeks to enhance the educational and career opportunities of students in traditional academic areas as well as students with a special interest in women's studies. The particular needs and concerns of part-time and continuing education students are also addressed.

All Women's Studies courses fulfill the general education gender requirement. Some courses can double count for both the ethnic and gender general education requirement.

UW-Platteville students can earn a minor or a certificate in Women's Studies.

Women's Studies Minor (24 credits)

Requirements include WOMSTD 1130 Introduction to Women's Studies 3 cr and at least one course from each of the following groups.

**Group One: Social Science (3 credits)**
- WOMSTD 2230 Women, Sex Roles and Society 3 cr
- WOMSTD 2530 Psychology and Women 3 cr
- WOMSTD 2730 Women in Science and Engineering 3 cr
- WOMSTD 3340 Management, Gender and Race 3 cr
- WOMSTD 3630 Ethnic and Gender Equity in Education 3 cr
- WOMSTD 3730 Women and the Law 3 cr
- WOMSTD 4130 Space, Place and Gender 3 cr

**Group Two: Humanities, Fines Arts, Historical Perspective (3 credits)**
- WOMSTD 2830 Survey of Women Writers 3 cr
- WOMSTD 2930 Minority Women Writers of the United States 3 cr
- WOMSTD 3430 Women and the Arts 3 cr
- WOMSTD 3520 American Women's History 3 cr
- WOMSTD 3530 Philosophy's Feminist Future: From Powerism to Personalism 3 cr
- WOMSTD 3700 Women in European Civilization 3 cr
- WOMSTD 4500 Women and Mythology: Goddess, Witch, Sibyl 3 cr
- ENGLISH 2780 Race and Gender in American Film 3 cr

**Group Three: Advanced Women's Studies (3 credits)**
- WOMSTD 4660 Cooperative Field Experience 3 cr
- WOMSTD 4730 Individual Research in Women's Studies 3 cr

Women’s Studies Certificate (15 credits)

The basic program consists of an interdisciplinary sequence of courses leading to a certificate in women's studies and a special notation on the transcript. Students enrolled in the certificate program are required to complete 15 credits of course work in Women's Studies, including Women's Studies 1130 Introduction to Women's Studies, and one 3000 or 4000 level course in Women's Studies which may include the internship or research project. All Women's Studies courses, including those that are cross-listed under the Women's Studies Program and the co-sponsoring departments, can be used to satisfy the requirements of the certificate program. This curriculum provides a model for students wishing to design individualized course sequences which support their personal and educational goals. Students interested in the certificate program should consult the director of Women's Studies.
Knowledge, Skill and Disposition Statements

Domain 1: Planning and Preparation
Candidates will:
- demonstrate knowledge of content and pedagogy;
- demonstrate knowledge of students;
- select instructional goals;
- demonstrate knowledge of resources;
- design coherent instruction;
- assess student learning.

Domain 2: The Classroom Environment
Candidates will:
- create an environment of respect and rapport;
- establish a culture for learning;
- manage classroom procedures;
- manage student behavior;
- organize physical space.

Domain 3: Instruction
Candidates will:
- communicate clearly and accurately;
- use questioning and discussion techniques;
- engage students in learning;
- provide feedback to students;
- demonstrate flexibility and responsiveness.

Domain 4: Professional Responsibilities
Candidates will:
- reflect on teaching;
- maintain accurate records;
- communicate with families;
- contribute to the school and district;
- grow and develop professionally;
- show professionalism.

Please contact the School of Education for further details regarding the assessment plan.

About the School and Majors

Undergraduate program areas within the School of Education include Physical Education/Health and Teacher Education. The school also includes graduate programs in Counselor Education and Teacher Education. Programs include:

Counselor Education
Contact: Kimberly Tuescher, Ph.D.
E-mail: tueschek@uwplatt.edu
Phone: 608.342.1252

Physical Education and Health
Contact: Colleen McCabe, Ed.D.
E-mail: mccabec@uwplatt.edu
Phone: 608.342.1573
Teacher Education
Contact: Gwen Coe, Ph.D.
E-mail: coe@uwplatt.edu
Phone: 608.342.1131

The School of Education has a rich history at UW-Platteville. The university has been preparing teachers since the first Normal School was established in 1866. The school takes great pride in this tradition and is committed to the continuation of quality in its educational offerings and programs.

The degree programs build on the School of Education theme, Best Practices Make the Difference. Best practices follow a developmental, reflective model. Best practices teachers are defined as professionals who are aware of the developmental stages of their students as well as their own professional developmental needs. Best practices teachers are growing in their skills of providing developmentally appropriate instruction and effective teacher strategies to assist students in becoming reflective thinkers. Best practices teachers are themselves reflective thinkers.

The School of Education administers professional education programs at UW-Platteville and is responsible for the preparation of teachers. The School of Education is responsible for all professional and clinical programs; serves as a resource center for students, faculty, program directors and administrators; maintains appropriate student records; and maintains appropriate records for accreditation and clinical programs; serves as a resource center for students, teachers. The School of Education is responsible for all professional programs at UW-Platteville and is responsible for the preparation of students.

Practices Make the Difference. Best practices follow a developmental, reflective model. Best practices teachers are defined as professionals who are aware of the developmental stages of their students as well as their own professional developmental needs. Best practices teachers are growing in their skills of providing developmentally appropriate instruction and effective teacher strategies to assist students in becoming reflective thinkers. Best practices teachers are themselves reflective thinkers.

Level 1 Benchmark: Admission to the School of Education

All students intending to become teachers in elementary, middle or secondary school should take the Pre-Professional Skills Test (PPST) in their freshman year. All students should file application for admission to the School of Education by their sophomore year at UWP.

Note: Only students who have been admitted to the School of Education may enroll in restricted education courses.

Transfer students must earn a minimum of 15 credits at UWP before admission to the School of Education. Transfer students may apply for admission during their first semester on campus and complete interview(s) and other requirements that semester.

To be eligible for admission, teacher candidates must meet the following minimum requirements:

1. Successfully complete the Pre-Professional Skills Test (PPST). Passing scores for PPST are reading 175, writing 174 and mathematics 173. Teacher candidates should take the PPST during their first year at UWP.
2. Earn grades of “C” or better in the following courses: Freshman Composition (ENGLISH 1130 and ENGLISH 1230), SPEECH (2010 is strongly recommended though 1010 will satisfy the speech requirement), TEACHING 1230 Introduction to Education or PHYSED 2320 Introduction to Physical Education and Health Promotion and 2010 Computer Applications in Education.
3. Have earned 40 semester credits in an accredited college of which at least 15 credits have been earned at UWP.
4. Have a cumulative grade point average (GPA) of 2.65 or better.
5. Prepare an admission portfolio, present it to an interview committee during Pre-Professional Days and be recommended for admission by the committee.
6. Satisfy tutoring requirement: applies only to students in early childhood-middle childhood (birth-age 11) program.
A student may be denied admission to the School of Education on the basis of either a low grade point average (GPA) or unsatisfactory scores on any subsection of the Pre-Professional Skills Test (PPST). In addition, a student might be denied admission based on faculty assessment of the applicant’s capacity to complete successfully the requirements of a professional teacher education program and to carry out the responsibilities of beginning teachers.

A student who has been denied admission on the basis of any of the established criteria may file an appeal with the chair of the Teacher Education Committee.

Level 2 Benchmark: Admission to Student Teaching

After admission to the School of Education, students complete course work, including methods courses and pre-student teaching field assignments, which give students the opportunity to demonstrate content knowledge, teaching skills and professional dispositions. Students must submit a student teaching portfolio as evidence of their competencies.

Requirements: To be eligible for admission to student teaching, a candidate must:

1. Meet or exceed the minimum required grade point average (GPA) of 2.75 overall and in major(s), teaching minor(s) and professional education courses. (Note: 3.00 is required in major and minor for elementary education, B-11, students.)
2. Have completed appropriate methods course(s) for the major and minor, as well as TEACHING 2130 and TEACHING 3320 or equivalent courses.
3. Have grades of “C” or better in required methods courses and in all required professional education courses completed.
4. Have documentation of an approved student teaching /level II portfolio on file.
5. Have passed the appropriate Praxis II content test(s).
6. Have been admitted to the School of Education for one full semester prior to student teaching.

Level 3 Benchmark: Student Teaching/Internship Experience and Licensure

Student teaching is the final component of the teacher education program and is scheduled for a full semester based on the local school calendar. Normally student teaching is completed in a school district within a 100-mile radius of Platteville. Upon completion of student teaching, students must submit a licensure portfolio demonstrating their competencies.

Intern Teaching

A limited number of students are permitted to complete an internship in lieu of regular student teaching. Intern candidates must have a minimum GPA of 3.00. Intern candidates are carefully screened by faculty and are interviewed by school districts as part of the selection process. The intern works in a team relationship with one or more teachers in the school system, spends a full semester under contract with the school district, is licensed by the Department of Public Instruction and receives compensation for duties performed. Contact the Coordinator of Clinical Experiences for more information.

Licensure

To become licensed to teach in Wisconsin, students must complete the following steps before an application form is submitted to the Wisconsin Department of Public Instruction or other state.

1. Complete the teacher education program with the minimum required grade point average in the major, minor and professional education courses.
2. Meet the minimum overall GPA of 2.75 required to complete the program.
3. Be judged as meeting all required performance standards reflected in the Wisconsin Teacher Standards and the knowledge, skills and dispositions of the UW-Platteville School of Education program. Initial teacher candidates must have evidence of successful review of a portfolio of artifacts reflecting their teaching performance and passing of the appropriate Praxis II content test(s).
4. Obtain a license application from the Certification Officer of the School of Education.
5. Pay the required fee and submit the completed application to the Certification Officer of the School of Education.

After transcripts and other measures of program completion have been reviewed, the Certification Officer may recommend licensure to the Department of Public Instruction.

Teacher education programs at UW-Platteville satisfy the requirements for licensure through the Wisconsin Department of Public Instruction. Wisconsin teaching licenses are highly regarded in other states; however, each state establishes its own set of rules for licensing teachers. While the School of Education assists with all aspects of the licensure process, it is ultimately the responsibility of those individuals planning to seek licensure in states other than Wisconsin to verify that they will qualify for licenses in those states.

Approved Licensure Programs

- Early Childhood through Middle Childhood (birth-age 11)
- Early Adolescence (ages 10-14)
- Early Adolescence through Adolescence (ages 10-21)
- Early Childhood through Adolescence (birth-age 21), which applies to special wide-range fields such as art, music, foreign languages, physical education/health, agriculture, technology education and theater

All licensure programs require the completion of a major and a professional education component.

Approved comprehensive majors, academic majors and minors are listed below. More detailed information on individual majors and minors (and the course descriptions) can be found by looking under the department or school that houses the major or minor. The listing will also include the college in which the department is housed.
Approved Comprehensive Majors

Agricultural Education (B-21): School of Agriculture (BILSA)
Agricultural Education/Technology Education dual certification (B-21): School of Agriculture and Department of Industrial Studies (BILSA)
Art (B-21): Department of Performing and Visual Arts (LAE)
Comprehensive (Broadfield) Social Sciences (10-21):
Department of Social Sciences (LAE)
Broadfield Science (10-21):
Department of Chemistry and Engineering Physics (EMS)
Music-Choral (B-21):
Department of Performing and Visual Arts (LAE)
Music-General (B-21):
Department of Performing and Visual Arts (LAE)
Music-Instrumental (B-21):
Department of Performing and Visual Arts (LAE)
Technology Education (B-21):
Department of Industrial Studies (BILSA)

Approved Majors

Biology: Department of Biology (BILSA)
Chemistry: Department of Chemistry and Engineering Physics (EMS)
Early Adolescence (middle-level, 10-14):
School of Education (LAE)
Elementary Education (B-11): School of Education (LAE)
English: Department of Humanities (LAE)
German: Department of Humanities (LAE)
History: Department of Social Sciences (LAE)
Mathematics: Department of Mathematics (EMS)
Physical Education: School of Education (LAE)
Spanish: Department of Humanities (LAE)
Theater: Department of Performing and Visual Arts (LAE)

Approved Minors

Biology: Department of Biology (BILSA)
Chemistry: Department of Chemistry and Engineering Physics (EMS)
Computer Science: Department of Computer Science and Software Engineering (EMS)
Early Childhood (B-11 only): School of Education (LAE)
English: Department of Humanities (LAE)
English/Language Arts: Department of Humanities (LAE)
Environmental Science: Department of Biology (BILSA)
French: Department of Humanities (LAE)
German: Department of Humanities (LAE)
Health: School of Education (LAE)
History: Department of Social Sciences (LAE)
Interdisciplinary Studies (10-14 program only):
School of Education (LAE)
Mathematics: Department of Mathematics (EMS)
Natural Science (10-14 program): Department of Chemistry and Engineering Physics (EMS)
Physics: Department of Chemistry and Engineering Physics (EMS)
Social Sciences: Department of Social Sciences (LAE)
Spanish: Department of Humanities (LAE)
Special Education/Inclusion: School of Education (LAE)
Speech Communication: Department of Performing and Visual Arts (LAE)
Theater: Department of Performing and Visual Arts (LAE)

Approved Concentrations

Adapted Physical Education (B-21):
Physical Education and Health (LAE)

Statutory and Administrative Code Requirements

Conservation
Teachers of science, social studies, agriculture, early childhood, elementary and middle-level education programs are required to complete course work in environmental education. GEOGRAPHY 3330 Environmental Conservation partially fulfills this requirement. A specified field experience completes this requirement.

Cooperatives
Wisconsin statutes specify that “in granting certificates for the teaching of courses in economics, social studies and agriculture, adequate instruction in cooperatives shall be required.” AGINDUS 2500 Producer and Consumer Cooperatives fulfills this requirement. Also, HISTORY 1430 History of the U.S. since 1877 includes a unit on cooperatives which satisfies this requirement for social studies teachers.

Reading
For teachers in B-11 programs, Wisconsin requires course work in the teaching of reading and language arts using appropriate instructional methods, including phonics.

Minority Relations
Wisconsin requires that all students completing teacher preparation programs demonstrate knowledge and understanding of minority group relations including:

1. The history, culture and tribal sovereignty of American Indian tribes and bands located in Wisconsin.
2. The history, culture and contributions of women and various racial, cultural, language and economic groups in the United States.
3. The philosophical and psychological bases of attitude development and change.
5. Evaluating and assessing the forces of discrimination, especially racism and sexism on faculty, students, curriculum, instruction, and assessment in the school program.
6. Minority group relations through direct involvement with various racial, cultural, language and economic groups in the United States.

In addition, students must demonstrate knowledge of conflict resolution including:

1. Resolving conflicts between pupils and between pupils and school staff.
2. Assisting pupils in learning methods of resolving conflicts between pupils and between pupils and school staff, including training in the use of peer mediation to resolve conflicts between pupils.
3. Dealing with crises, including violent, disruptive, potentially violent or potentially disruptive situations that may arise in school or activities supervised by school staff as a result of conflicts between pupils or between pupils and other persons.
Children with Disabilities (CWD)

All applicants for teaching licenses must meet the code requirements with regard to Children with Disabilities (CWD). TEACHING 3320 Psychology of Learning Encompassing the Exceptional Child meets this requirement.

School Setting Field Experiences

Effective teacher preparation demands that pre-service teachers have laboratory experiences with children/adolescents during their preparation. These experiences are designed to acquaint teacher candidates with a variety of schools and settings and to encourage them to connect educational theories with practice. Experiences are developmental, structured and supervised by university and school faculty. Teacher candidates will spend more than 150 hours in school settings prior to student teaching. Many professional education courses include service learning hours and laboratory experiences.

TEACHER EDUCATION PROGRAMS

www.uwplatt.edu/education

Program Contact: Gwendolyn Coe
Office: 140M Doudna Hall
Phone: 608.342.1131
E-mail: coe@uwplatt.edu

Professors:
Alison Brooke Bunte
Gwendolyn Coe
Walter C. Iselin
Rea Kirk
Tom Lo Guidice
William McBeth
John F. Nkemnji
Carol M. Lange (Emerita)

Associate Professors:
David Braun y Harycki
Leigh Monhardt

Assistant Professors:
Gregory Imbur
Daniel Leitch
Florence Omachonu
Wonim Son

Lecturers:
Sue Alborn-Yilek
Dave Chellevold
Linda Doser
Lisa Emendorfer
Jodean Grunow
Dale Henze
Vic Levy
Julie Phillips

Students seeking teaching licensure must be sure that courses taken for university general education requirements also satisfy the Wisconsin Department of Public Instruction (DPI) requirements. The following are general guidelines. Specific requirements and suggestions are included with the licensure areas that follow this section.

General Requirements

Communication Skills:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 1130</td>
<td>3 cr</td>
<td>(must attain “C” or better)</td>
</tr>
<tr>
<td>ENGLISH 1230</td>
<td>3 cr</td>
<td>(must attain “C” or better)</td>
</tr>
<tr>
<td>SPEECH 2010</td>
<td>3 cr</td>
<td>(strongly recommended)</td>
</tr>
<tr>
<td>(must attain “C” or better)</td>
<td>3 cr</td>
<td></td>
</tr>
<tr>
<td>SPEECH 1010</td>
<td>2 cr</td>
<td>(accepted)</td>
</tr>
<tr>
<td>(must attain “C” or better)</td>
<td>2 cr</td>
<td></td>
</tr>
</tbody>
</table>

Foreign Language (0-8 credits):

Students who have not averaged “C” or better in a second year high school language have not met this requirement.

Mathematics:

Students must complete mathematics courses as required by various programs.
Physical Education:

Students must complete an approved wellness class (1-3 credits) and an approved physical activity class (1 credit).

Humanities, Fine Arts and Historical Perspective:

Education students must complete four approved courses (12 credits) satisfying the following humanities guidelines:

1. There must be at least one course from each of the three areas of Humanities, Fine Arts and Historical Perspective. HISTORY 1020 satisfies the DPI non-Western culture requirement and the Historical Perspective requirement. A literature course is required to fulfill the Humanities requirement.
2. Students must complete a second course from one of the three areas listed above.

Social Sciences:

Students must complete three approved General Education Social Sciences courses (9 credits) satisfying the following:

1. Students must complete a course in state, local and national government. POLISCI 1230 satisfies this requirement.
2. Students in early childhood, elementary or middle-level programs, agriculture, any science major/minor or any social sciences major/minor must complete a course in environmental conservation. GEOGRPHY 3330 Environmental Conservation partially satisfies this requirement. A specified field experience completes this requirement.
3. All students must complete a second course in one of two disciplines selected for this area.

Natural Sciences:

All students must complete a 4-5 credit course in physical science and a 4-5 credit course in biological life science (for a 9 credit total). Both must be lab courses.

International Education:

Students must complete an approved course in International Education (3 credits). HISTORY 1020 satisfies this requirement.

Ethnic/Gender Studies:

Students must complete an approved course in Ethnic/Gender Studies (3-6 credits): TEACHING 3630 Ethnic and Gender Equity in Education satisfies this requirement.

Early Childhood/Middle Childhood Education—Birth-Age 11

The curriculum in the Early Childhood through Middle Childhood Education program is designed to develop resourceful, creative and competent teachers to work with young children in educational settings. The program, which integrates theory and practice, meets the requirements for birth through age 11 teaching licensure for the State of Wisconsin. Beginning in the sophomore year, academic course work is enriched by involvement with children and families, through observation/participation experiences in the UWP Children’s Center. Graduates are employed as preschool, kindergarten and elementary teachers; administrators of child care centers; curriculum specialists; and resource and referral specialists within private corporations and the public sector.

General Requirements

Bachelor of Science Degree

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for graduation</td>
<td>129-135</td>
</tr>
<tr>
<td>General Education</td>
<td>49-55</td>
</tr>
<tr>
<td>Elementary Education Major</td>
<td>25</td>
</tr>
<tr>
<td>Early Childhood Minor</td>
<td>24</td>
</tr>
<tr>
<td>Professional Education</td>
<td>31</td>
</tr>
</tbody>
</table>

Program completion requires a GPA of at least 3.00 in major, minor and professional education; 2.75 overall prior to student teaching.

General Education (B-11) (49-55 credits)

Communication (8-9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 1130</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 1230</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 2010</td>
<td>3</td>
</tr>
</tbody>
</table>

“C’s” or better required

Foreign Language (0-8 credits):

Students who have not averaged “C” or better in a second year high school language have not met this requirement.

Math (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1030</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2030</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3030</td>
<td>3</td>
</tr>
</tbody>
</table>

“C’s” or better required

Physical Education (2 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSED 1000</td>
<td>1</td>
</tr>
<tr>
<td>PHYSED ****</td>
<td>1</td>
</tr>
</tbody>
</table>

(see class schedule)

Humanities, Fine Arts and Historical Perspective (12 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1230</td>
<td>3</td>
</tr>
<tr>
<td>ART 1240</td>
<td>3</td>
</tr>
<tr>
<td>HISTORY 1020</td>
<td>3</td>
</tr>
</tbody>
</table>

“C’s” or better required

Social Sciences (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLISCI 1230</td>
<td>3</td>
</tr>
<tr>
<td>GEOGRPHY 3330</td>
<td>3</td>
</tr>
<tr>
<td>PSYCHLGY 1130</td>
<td>3</td>
</tr>
<tr>
<td>PSYCHLGY 3130</td>
<td>3</td>
</tr>
</tbody>
</table>

Social Sciences lab course (required) 4-5

Natural Sciences (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLISCI 1230</td>
<td>3</td>
</tr>
<tr>
<td>GEOGRPHY 3330</td>
<td>3</td>
</tr>
<tr>
<td>PSYCHLGY 1130</td>
<td>3</td>
</tr>
<tr>
<td>PSYCHLGY 3130</td>
<td>3</td>
</tr>
</tbody>
</table>

Physical Science lab course (required) 4-5

select from chemistry, geography, geology, physics or physical science

General Requirements

Bachelor of Science Degree

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for graduation</td>
<td>129-135</td>
</tr>
<tr>
<td>General Education</td>
<td>49-55</td>
</tr>
<tr>
<td>Elementary Education Major</td>
<td>25</td>
</tr>
<tr>
<td>Early Childhood Minor</td>
<td>24</td>
</tr>
<tr>
<td>Professional Education</td>
<td>31</td>
</tr>
</tbody>
</table>

Program completion requires a GPA of at least 3.00 in major, minor and professional education; 2.75 overall prior to student teaching.

General Education (B-11) (49-55 credits)

Communication (8-9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 1130</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 1230</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 2010</td>
<td>3</td>
</tr>
</tbody>
</table>

“C’s” or better required

Foreign Language (0-8 credits):

Students who have not averaged “C” or better in a second year high school language have not met this requirement.

Math (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1030</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2030</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3030</td>
<td>3</td>
</tr>
</tbody>
</table>

“C’s” or better required

Physical Education (2 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSED 1000</td>
<td>1</td>
</tr>
<tr>
<td>PHYSED ****</td>
<td>1</td>
</tr>
</tbody>
</table>

(see class schedule)

Humanities, Fine Arts and Historical Perspective (12 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1230</td>
<td>3</td>
</tr>
<tr>
<td>ART 1240</td>
<td>3</td>
</tr>
<tr>
<td>HISTORY 1020</td>
<td>3</td>
</tr>
</tbody>
</table>

“C’s” or better required

Social Sciences (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLISCI 1230</td>
<td>3</td>
</tr>
<tr>
<td>GEOGRPHY 3330</td>
<td>3</td>
</tr>
<tr>
<td>PSYCHLGY 1130</td>
<td>3</td>
</tr>
<tr>
<td>PSYCHLGY 3130</td>
<td>3</td>
</tr>
</tbody>
</table>

Social Sciences lab course (required) 4-5

Natural Sciences (9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLISCI 1230</td>
<td>3</td>
</tr>
<tr>
<td>GEOGRPHY 3330</td>
<td>3</td>
</tr>
<tr>
<td>PSYCHLGY 1130</td>
<td>3</td>
</tr>
<tr>
<td>PSYCHLGY 3130</td>
<td>3</td>
</tr>
</tbody>
</table>

Physical Science lab course (required) 4-5

select from chemistry, geography, geology, physics or physical science
International Education/Ethnic and Gender Studies (6-9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HISTORY 1020</td>
<td>World Civilization II</td>
<td>3 cr</td>
</tr>
<tr>
<td>(double counts as Historical Perspective and International Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEACHING 3630</td>
<td>Ethnic/Gender Equity in Education</td>
<td>3 cr</td>
</tr>
<tr>
<td>(counts for both ethnic and gender studies plus Professional Education)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Elementary Education Major–Birth-Age 11 (25 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSED 2040</td>
<td>Health, Nutrition and Physical Education</td>
<td>4 cr</td>
</tr>
<tr>
<td>TEACHING 3040</td>
<td>Reading, Literature and Literacy I</td>
<td>4 cr</td>
</tr>
<tr>
<td>TEACHING 4040</td>
<td>Reading, Literature and Literacy II</td>
<td>4 cr</td>
</tr>
<tr>
<td>TEACHING 4090</td>
<td>Integrated Methods: Language Arts and Social Studies</td>
<td>4 cr</td>
</tr>
<tr>
<td>TEACHING 4140</td>
<td>Teaching Mathematics/Science in Early Childhood/Elementary Settings</td>
<td>4 cr</td>
</tr>
<tr>
<td>MUSIC 3160</td>
<td>Elementary Music Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>TEACHING 4250</td>
<td>Senior Seminar</td>
<td>2 cr</td>
</tr>
</tbody>
</table>

GPA 3.00 or better and grade of “C” or better

Special Education/Inclusion Minor (24 credits)

The special education/inclusion minor is administered by the School of Education. It will lead to Wisconsin licensure in adaptive education, which means the holder of a regular education license will also be licensed to address Children with Disabilities (CWD) in the “general” education classroom.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHING 4030</td>
<td>Management for Children with Disabilities (CWD)</td>
<td>3 cr</td>
</tr>
<tr>
<td>TEACHING 4120</td>
<td>Pre-Student Teaching in CWD Environment or approved substitution</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 4150</td>
<td>Assessing Children with Disabilities (CWD)</td>
<td>3 cr</td>
</tr>
<tr>
<td>COUNSLED 4600</td>
<td>Measurement for Counseling</td>
<td>3 cr</td>
</tr>
<tr>
<td>TEACHING 4200</td>
<td>Transitions for Children with Disabilities (CWD)</td>
<td>3 cr</td>
</tr>
<tr>
<td>TEACHING 4420</td>
<td>Oral Language and Emergent Literacy</td>
<td>3 cr</td>
</tr>
<tr>
<td>TEACHING 4630</td>
<td>Learning and Language Disorders</td>
<td>3 cr</td>
</tr>
<tr>
<td>TEACHING 4730</td>
<td>Working with Families of Children with Disabilities (CWD)</td>
<td>2 cr</td>
</tr>
<tr>
<td>TEACHING 4830</td>
<td>Strategies for Effective Inclusion</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Directed Elective (3-4 credits):

The directed elective is chosen from a list of approved courses that deal with topics related to exceptional needs education identified by Teacher Education and other departments and programs such as Psychology, Sociology, Counselor Education, Ethnic Studies, Women's Studies and Physical Education.

Early Adolescence–Ages 10-14

Credit requirement for graduation.......................... 124 credits and up
General Education.....................................................49-55 credits
Minor(s) .................................................................24-48 credits
Professional Education............................................51 credits

General Education–Ages 10-14 (49-55 credits)

Communication (8-9 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 1130</td>
<td>Freshman Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENGLISH 1230</td>
<td>Freshman Composition II</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPEECH 1010</td>
<td>Public Speaking (acceptable)</td>
<td>2 cr</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPEECH 2010</td>
<td>Speech Communication for Teachers (recommended)</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

“C”s” or better required

Foreign Language (0-8 credits):

Students who have not averaged “C” or better in a second year high school language have not met this requirement. Check the catalog for specific requirements.
Math (9 credits):
MATH 1030 Math for Educators I 3 cr
MATH 2030 Math for Educators II 3 cr
MATH 3030 Math for Educators III 3 cr
“C’s” or better required

Physical Education (2 credits):
PHYSED 1000 Fitness Assessment and Management 1 cr
PHYSED XXXX Physical Activity 1 cr
(see class schedule)

Humanities, Fine Arts and Historical Perspective (12 credits):
Fine Arts course 3 cr
Humanities Literature course 3 cr
HISTORY 1020 World Civilization II 3 cr
In-depth Humanities, Fine Arts or Historical Persp. course 3 cr

Social Sciences (9 credits):
POLISCI 1230 Introduction to American Government (required) 3 cr
GEOGRPHY 3330 Environmental Conservation (required) 3 cr
In-depth Social Sciences Course 3 cr

Natural Sciences (9 credits):
Biological Science lab course 4-5 cr
Physical Science lab course (required): select from chemistry, geography, geology, physics, or physical science 4-5 cr

International Education/Ethnic and Gender Studies (6-9 credits):
HISTORY 1020 World Civilization II 3 cr
(double counts as Historical Perspective and International Education)
TEACHING 3630 Ethnic/Gender Equity in Education 3 cr
(counts for both ethnic and gender studies plus Professional Education)

Professional Education–Ages 10-14 (51 credits)
Grade of “C” or better in all courses listed below:
PHYSED 2030 Health Education 2 cr
TEACHING 1010 Middle-Level Mentoring 2 cr
or
TEACHING 1230 Introduction to Education 2 cr
TEACHING 2010 Computer Applications in Education 1 cr
TEACHING 2020 Middle-Level Exploratory I 1 cr
TEACHING 2030 Middle-Level Exploratory II 1 cr
TEACHING 2130 Human Growth and Development 3 cr
TEACHING 3320 Psychology of Learning/Exceptional Child 3 cr
TEACHING 3630 Ethnic/Gender Equity in Education 3 cr
TEACHING 4050 Middle-Level Professional Preparation 18 cr
TEACHING 4070 Post-Student Teaching Seminar 2 cr
TEACHING 4460 Student Teaching 12 cr
or
TEACHING 4760 Internship 12 cr
TEACHING 4990 Licensure Portfolio 3 cr
GPA 2.75 or better

Minors–Ages 10-14 (24-48 credits)
GPA 2.75 or better

Interdisciplinary Studies Minor or Minors in Two Academic Areas
The Interdisciplinary Studies minor provides students majoring in Early Adolescence with the necessary depth and breadth in the core academic areas they will be licensed to teach. Students choose two areas of concentration (18 credits each) and two other areas in which they complete 12-credit topics. Core academic areas include English/language arts, social sciences, mathematics and science. Additional study in fine arts and foreign language is possible. A program checklist for this minor is available from the School of Education office.

Early Adolescence/Adolescence–Ages 10-21

Middle/Secondary Education Requirements
Credit requirement for graduation ........................................ 120 credits and up
General Education ........................................................... 43-49 credits
Major/Minor ................................................................. 36-60 credits
Professional Education .................................................... 46-55 credits
Range of total credits for completion ................................. 125-162 credits

General Education–Ages 10-21 (43-49 credits)

Communication (8-9 credits):
ENGLISH 1130 Freshman Composition I 3 cr
ENGLISH 1230 Freshman Composition II 3 cr
SPEECH 1010 Public Speaking (acceptable) 2 cr
or
SPEECH 2010 Speech Communication for Teachers (recommended) 3 cr
“C’s” or better required

Foreign Language (0-8 credits):
Students who have not averaged “C” or better in a second year high school language have not met this requirement. Check the catalog for specific requirements.

Math (3 credits):
MATH at or above 1630 3 cr

Physical Education (2 credits):
PHYSED 1000 Fitness Assessment and Management 1 cr
PHYSED XXXX Physical Activity 1 cr
(see class schedule)

Humanities, Fine Arts and Historical Perspective (12 credits):
Fine Arts Course (required) 3 cr
Humanities Literature Course (required) 3 cr
HISTORY 1020 World Civilization II (required) 3 cr
In-depth Humanities, Fine Arts or Historical Persp. Course 3 cr
Social Sciences (9 credits):
POLISCI 1230 Introduction to American Government (required) 3 cr
Social Sciences Course in 2nd Discipline 3 cr
(Note: GEOGRPHY 3330 Environmental Conservation is required for social science and science majors and minors)
In-depth Social Science Course in either
One subject from above in this list
or
PSYCHLGY 1130 General Psychology 3 cr
and
PSYCHLGY 3230 Adolescent Psychology 3 cr

Natural Sciences (9 credits):
Biological Science lab course (required) 4-5 cr
Physical Science lab course (required): select from chemistry, geography, geology, physics, or physical science 4-5 cr

International Education/Ethnic and Gender Studies (6-9 credits):
HISTORY 1020 World Civilization II 3 cr
(double counts as Historical Perspective and International Education)
TEACHING 3630 Ethnic/Gender Equity in Education 3 cr
(counts for both ethnic and gender studies plus Professional Education)

Major/Minor–Ages 10-21
(36-60 credits)
See appropriate department listings for required courses (GPA 2.75 or better required in these courses).

Professional Education–Ages 10-21 (46-55 credits)

Required courses:
TEACHING 1230 Introduction to Education 2 cr
TEACHING 2010 Computer Applications in Education 1 cr
TEACHING 2130 Human Growth and Development 3 cr
or
PSYCHLGY 3230 Adolescent Psychology 3 cr
TEACHING 3320 Psychology of Learning/Exceptional Child 3 cr
TEACHING 3630 Ethnic/Gender Equity in Education 3 cr
TEACHING 3840 Reading for Middle/Secondary Teachers 4 cr
Methods of Teaching Major/Minor 3-6 cr
TEACHING 4460/4560 Student Teaching 12 cr
or
TEACHING 4760 Internship 12 cr
TEACHING 4990 Licensure Portfolio 3 cr
Grade of "C" or better required

Must complete Option A or B

Option A (12 credits):
TEACHING 3110 Key Concepts in Middle Level Education 2 cr
TEACHING 3120 Characteristics of Transcients 2 cr
TEACHING 4020 Educational Media Technology 2 cr
TEACHING 4210 Pre-Student Teaching 2 cr
TEACHING 4220 Advising, Interaction and Communication 2 cr
TEACHING 4620 Teaching Transcients 2 cr

Option B (18 credits):
TEACHING 4050 Middle-Level Professional Preparation 18 cr

Early Childhood/Adolescence–Birth-Age 21

Special Fields Requirements
Credit requirement for graduation 120 credits and up
General Education .....................................................43-49 credits
Major ................................................................. 36 credits and up
Professional Education ...............................................38-48 credits

General Education–Birth-Age 21 (43-49 credits)

Communication (8-9 credits):
ENGLISH 1130 Freshman Composition I 3 cr
ENGLISH 1230 Freshman Composition II 3 cr
SPEECH 1010 Public Speaking (acceptable) 2 cr
or
SPEECH 2010 Speech Communication for Teachers (recommended) 3 cr
“C’s” or better required

Foreign Language (0-8 credits):
Students who have not averaged “C” or better in a second year high school language have not met this requirement. Check the catalog for specific requirements.

Math (3 credits):
MATH at or above 1630 3 cr

Physical Education (2 credits):
PHYSED 1000 Fitness Assessment and Management 1 cr
PHYSED XXXX Physical Activity (see class schedule) 1 cr

Humanities, Fine Arts and Historical Perspective (12 credits):
Fine Arts Course (required) 3 cr
Humanities Literature Course (required) 3 cr
HISTORY 1020 World Civilization II (required) 3 cr
In-depth Humanities, Fine Arts or Historical Perspective 3 cr

Social Sciences (9 credits):
POLISCI 1230 Introduction to American Government (required) 3 cr
Social Sciences Course in 2nd discipline 3 cr
(Note: GEOGRPHY 3330 Environmental Conservation is required for Agricultural Education majors)
In-depth Social Sciences Course 3 cr

Natural Sciences (9 credits):
Biological Science lab course (required) 4-5 cr
Physical Science lab course (required): select from chemistry, geography, geology, physics or physical science 4-5 cr
International Education/Ethnic and Gender Studies (6-9 credits):
HISTORY 1020 World Civilization II 3 cr (double counts as Historical Perspective and International Education)
TEACHING 3630 Ethnic/Gender Equity in Education 3 cr (counts for both ethnic and gender studies plus Professional Education)

Major/Minor–Birth-Age 21
(credits vary)

GPA 2.75 or better
See appropriate department listings for required courses.

Professional Education–Birth-Age 21
(38-48 credits)

Required courses (30+ credits):
TEACHING 1230 Introduction to Education 2 cr
TEACHING 2010 Computer Applications in Education 1 cr
TEACHING 2130 Human Growth and Development 3 cr
TEACHING 3320 Psychology of Learning/Exceptional Child 3 cr
TEACHING 3630 Ethnic/Gender Equity in Education 3 cr
Methods of Teaching Major 3+ cr
TEACHING 4660 Student Teaching 12 cr
or
TEACHING 4760 Internship 12 cr
TEACHING 4990 Licensure Portfolio 3 cr

GPA 2.75 or better; Grade of “C” or better in all courses

Must complete Option A, B or C
(Note: This does not apply to Physical Education and Health.)

Option A (8 credits):
TEACHING 4020 Educational Media Technology 2 cr
TEACHING 4210 Pre-Student Teaching 2 cr
TEACHING 3110 Key Concepts in Middle Level Education 2 cr
TEACHING 3120 Characteristics of Transcendent 2 cr

Option B (12 credits):
TEACHING 3110 Key Concepts in Middle Level Education 2 cr
TEACHING 3120 Characteristics of Transcendent 2 cr
TEACHING 4020 Educational Media Technology 2 cr
TEACHING 4210 Pre-Student Teaching 2 cr
TEACHING 4220 Advising, Interaction and Communication 2 cr
TEACHING 4620 Teaching Transcendent 2 cr

Option C (18 credits):
TEACHING 4050 Middle-Level Professional Preparation 18 cr

Counselor Education

Program Contact: Kim Tuescher, Ph.D.
Office: 402 Warner Hall
Phone: 608.342.1252
E-mail: tueschek@uwplatt.edu

Professor:
Kimberly Tuescher

Associate Professor:
Dominic Barraclough

Assistant Professors:
Steven Benish
Patricia Heer

About the Counselor Education Program

The School of Education offers a Counselor Education program which is primarily responsible for preparing students for a Master of Science in Education (MSE) degree in school, community counseling, and higher education. Undergraduate course offerings also support the teacher education curricula and are valuable to undergraduate students interested in careers working with people. More information can be obtained by calling the department or visiting its website.
About the Physical Education and Health Program

The School of Education offers a major in physical education with a State of Wisconsin 860 certification in adapted physical education, a minor in physical education, a minor in health education and an emphasis in health promotion.

Mission Statement

The mission of the Health and Physical Education program is three-fold in nature: 1) to produce pre-service teachers ready to implement “Best Practices” in Health, Physical Education and Adapted Physical Education; 2) to produce health promotion specialists ready for a wide variety of programs utilizing wellness components, such as YMCAs, youth clubs and corporate/club fitness centers; and 3) to provide all university students the opportunity to develop positive concepts of wellness and skills to participate in lifetime wellness activities.

Goals and Objectives

Graduates of the Physical Education program will demonstrate knowledge of and/or skills in:

1. biological sciences including the structure, function, principles and effects of movement and activity on the human body as well as demonstrated competence in anatomy, physiology, biomechanics, kinesiology and exercise physiology;
2. health-related fitness, including practical application in an authentic laboratory setting of physical education;
3. the essential skills and the capacity to teach a wide variety of activities including fundamental motor skills, sports (lifetime, team, individual), movement (creative, rhythms, dance), aquatics and outdoor activities (recreational, experiential);
4. teaching methods with experiences in organizing, planning, implementing, administering and evaluating a total program of physical education, including curriculum specific to physical education, intramural, recreational and interscholastic activities;
5. budget development, and the selection, purchase, care and maintenance of facilities, equipment and supplies;
6. safety procedures, first aid and CPR;
7. age-appropriate physical training and injury prevention methods;
8. liability and legal considerations (Title IX, sports law);
9. pupil conditions which may affect performance in physical education classes including diagnostic methods, teaching techniques, and evaluation and prescriptive programming of pupils whose needs can be met by minor program modification or through specially designed individual programs;
10. the application of behavioral and social science concepts related to physical education, including foundations, multi-cultural awareness, classroom management, conflict resolution, peer cooperation and mediation, motivational techniques, integration techniques and gender equity.

General Requirements
Bachelor of Science Degree

Total for Graduation........................................................... 133 credit
General Education........................................................... 48 credits
Major PE Studies.............................................................. 60 credits
Professional Education...................................................... 25 credits

Physical Education Major

Grades of “C” or better in all courses required for physical education teaching certification. Students must have a 2.65 overall GPA for admission to teacher education and 2.75 in major and professional education courses for admission to student teaching.

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSED 2020</td>
<td>First Aid</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 2030</td>
<td>Health Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 2080</td>
<td>Movement Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 2320</td>
<td>Introduction to Physical Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 2330</td>
<td>Adventure Education</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 2410</td>
<td>Team Sports</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 2430</td>
<td>Adventure Education Practicum</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHYSED 2510</td>
<td>Individual Sports</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 3010</td>
<td>Technology in Health and</td>
<td>2 cr</td>
</tr>
<tr>
<td></td>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td>PHYSED 3020</td>
<td>Physiology of Exercise</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHYSED 3040</td>
<td>Adapted Aquatics</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 3220</td>
<td>Teaching Sexuality and Drugs</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 3330</td>
<td>Lifetime Activities</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 3400</td>
<td>Outdoor Activities/Water Safety</td>
<td>2 cr</td>
</tr>
<tr>
<td></td>
<td>Instruction</td>
<td></td>
</tr>
<tr>
<td>PHYSED 3440</td>
<td>Elementary/Middle School,</td>
<td>2 cr</td>
</tr>
<tr>
<td></td>
<td>Physical Education Methods</td>
<td></td>
</tr>
<tr>
<td>PHYSED 3500</td>
<td>Health Methods</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHYSED 3510</td>
<td>Assessment and Screening</td>
<td>2 cr</td>
</tr>
<tr>
<td></td>
<td>in Physical Education</td>
<td></td>
</tr>
<tr>
<td>PHYSED 3720</td>
<td>Kinesiology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHYSED 3830</td>
<td>Perceptual Motor Learning</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 3850</td>
<td>Nutrition</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 3920</td>
<td>Emotional Health</td>
<td>2 cr</td>
</tr>
<tr>
<td>PHYSED 4320</td>
<td>Consumer Health</td>
<td>2 cr</td>
</tr>
</tbody>
</table>
PHYSED 4330 Organization Administration and Curriculum of Physical Education and Health Education 4 cr
PHYSED 4520 Injury Prevention and Treatment 2 cr
PHYSED 4530 Practicum in Adapted Physical Education 3 cr
PHYSED 4940 Seminar in Community/Environmental Health Education 3 cr

Science course (4 credits):
BIOLOGY 2340 Essentials of Human Anatomy and Physiology 4 cr
or
BIOLOGY 2140 Anatomy and Physiology I 4 cr

Professional Education courses (25 credits):
TEACHING 2010 Computer Applications in Education 1 cr
PHYSED 3430 Teaching Exceptional Children in Health and Physical Education 3 cr
TEACHING 3630 Ethnic and Gender Equity in Education 3 cr
PHYSED 4230 Methods in Middle/Secondary Education 3 cr
TEACHING 4660 B-21 Student Teaching 12 cr
TEACHING 4990 Licensure Portfolio 3 cr

State of Wisconsin 860 Licensure/Adapted Physical Education (10 credits):
The following courses will satisfy the Department of Public Instruction requirements for an 860 Physical Education/Special Education 3-year licensure (licensure in adapted physical education):

PHYSED 3430 Teaching Exceptional Children in Health and Physical Education 3 cr
PHYSED 3510 Assessment and Screening in Physical Education 2 cr
PHYSED 3830 Perceptual Motor Learning and Motor Development 2 cr
PHYSED 4530 Practicum in Adapted Physical Education 3 cr

Health Education Minor (29 credits)

Required courses:
PHYSED 2020 First Aid/Accident Prevention/Community CPR 2 cr
PHYSED 2030 Health Education 2 cr
PHYSED 3220 Teaching Human Sexuality, Alcohol and Other Drugs 2 cr
PHYSED 3430 Teaching Exceptional Children Health and Physical Education 3 cr
PHYSED 3500 Methods of Teaching Health Education 3 cr
PHYSED 3850 Nutrition 2 cr
PHYSED 3920 Emotional Health 2 cr
PHYSED 4320 Consumer Health 2 cr
PHYSED 4330 Organization, Administration and Curriculum of Physical Education and Health Promotion 4 cr
PHYSED 4940 Seminar Community/Environmental Health Education 3 cr

Science course (4 credits):
BIOLOGY 2340 Essentials of Human Anatomy and Physiology 4 cr
or
BIOLOGY 2140 Anatomy and Physiology I 4 cr

Health Promotion Emphasis
Total for Graduation..................................................129 credits
General Education........................................................48 credits
Major PE Studies............................................................69 credits
Other required courses..................................................12 credits

An overall GPA of 2.75 is required to qualify for an internship.

Required courses (52-55 credits):
PHYSED 1000 Fitness Assessment Management 1 cr
PHYSED 2010 Aerobics/Hydroaerobics 1 cr
PHYSED 2020 First Aid 2 cr
PHYSED 2030 Health Education 3 cr
PHYSED 2320 Introduction to Physical Education 2 cr
PHYSED 2510 Individual Sports 2 cr
PHYSED 3000 Level or above Elective 2 or 3 cr
PHYSED 3000 Level or above Elective 2 or 3 cr
PHYSED 3000 Level or above Elective 2 or 3 cr
PHYSED 3020 Physiology of Exercise 3 cr
PHYSED 3120 Stress Management at the Worksite 2 cr
PHYSED 3330 Lifetime Activities 2 cr
PHYSED 3360 Fitness Evaluation 1 cr
PHYSED 3380 Fitness Programming and Prescription 2 cr
PHYSED 3400 Outdoor Activities/Water Safety Instruction 2 cr

PHYSED 3420 Health Promotion at the Workplace 2 cr
PHYSED 3500 Methods of Teaching Health Education 3 cr
PHYSED 3720 Kinesiology 3 cr
PHYSED 3850 Nutrition 2 cr
PHYSED 4320 Consumer Health 2 cr
PHYSED 4330 Organization, Administration and Curriculum of Physical Education and Health Promotion 4 cr
PHYSED 4410 Seminar in Health Promotion 3 cr
PHYSED 4520 Injury Prevention/Treatment 2 cr
PHYSED 4620 Advanced Athletic Training 2 cr

Recommended course work outside of Physical Education (15 credits):
BUSADMIN 2330 Leadership and Management 3 cr
BUSADMIN 2630 Introduction to Marketing 3 cr
BUSADMIN 3340 Management, Gender, and Race 3 cr
COMMNCTN 3010 Business Communication 3 cr
TEACHING 2010 Computer Applications in Education 1 cr
PHYSED 3010 Technology in Health and Physical Education 2 cr
or
TEACHING 4020 Education Media Technology 2 cr

A minor must be approved by the advisor and the physical education program coordinator.

Recommended: Business administration, psychology or health education
Required internships (14-18 credits):

PHYSED 4850  Fitness Intern (I)  3 cr
PHYSED 4860  Fitness Intern (II)  3 cr
PHYSED 4870  Fitness Intern (off campus)  8-12 cr

Science course (4 credits):

BIOLOGY 2340  Essentials of Human Anatomy and Physiology  4 cr

or

BIOLOGY 2140  Anatomy and Physiology I  4 cr

In order to be assigned to an off-campus internship, the student must meet the following criteria:
1. Senior standing
2. Overall GPA of 2.75 or better
3. Attainment of grade “C” or better in all health and physical education courses
4. Attainment of grade “C” or better in BIOLOGY 2340 or BIOLOGY 2140
5. Successful completion of Level I and II internships
Course Descriptions

This page provides information for reading course descriptions. This upper level course would be found in the Geography and Geology section of the Department of Social Sciences. It has a prerequisite of junior or senior standing, is offered both fall and spring, and carries Social Science general education credit.

For further explanation of the different parts of the course description, read on.

Course Number

The four-digit number to the right of the departmental code is the course number.

- 0000-0990 No credit towards graduation
- 1000-2990 Lower level undergraduate (credit)
- 3000-4990 Upper level undergraduate (credit)
- 5000-7990 Graduate level

Credits

The course credits are listed to the right of the course number. One credit hour usually represents one hour of class time per week plus two hours of out of class study.

Course Title and Course Description

The course title is listed in bold. A brief description of the course is included after the title.

Prerequisite or Corequisite Designation

P: Designates that the course has a prerequisite (a course that must be taken before this class)

C: Designates that the course has a corequisite (a course that must be taken at the same time as this class)

Semester Designation

Designates which semester the course is offered. This serves as a general guide and does not guarantee that a course will be offered during a particular semester: Fall, Spring, Summer, Winterim. Contact the department for current information on course offerings and rotation. Students who find courses without a semester designation should consult with the department chairperson.

General Education Requirements

Lists which general education requirements this course meets.

- **HUM:** Carries general education Humanities credit
- **FA:** Carries general education Fine Arts credit
- **HP:** Carries general education Historical Perspective credit
- **SS:** Carries general education Social Sciences credit
- **NS:** Carries general education Natural Sciences credit
- **IE:** Carries general education International Education credit
- **EGS:** Carries general education Ethnic and Gender Studies credit
- **E:** Carries general education Ethnic Studies credit
- **G:** Carries general education Gender Studies credit

---

<table>
<thead>
<tr>
<th>Sample: GEOGRAPHY 3330 3 credits</th>
</tr>
</thead>
</table>

**GEOGRAPHY 3330 3 credits**

**Environmental Conservation**

The importance of natural resources to the national interest; current problems of resource allocation and use.

P: junior or senior standing. (Fall Spring)

GE: Social Science.
Accounting Courses

ACCTING 2010 3 credits
Financial Accounting
Introduction to accounting concepts and procedures including the accounting cycle, assets, liabilities, and financial statements. Develops the ability to use accounting information for decision making.
Components: Lecture

ACCTING 2020 3 credits
Management Accounting
Introduction to management accounting topics such as cost accounting, cost analysis, budgeting, and variance analysis. Focuses on both procedures and the drawing of inferences from the results for more effective and efficient managerial decision making.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2010

ACCTING 2050 3 credits
Advanced Accounting I
An in-depth coverage of business acquisitions and preparation of consolidated financial statements, plus coverage of foreign currency accounting and governmental accounting.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2010

ACCTING 3010 3 credits
Intermediate Accounting I
Detailed coverage of the accounting cycle, financial statements, assets, and income determination. Emphasizes problem solving as well as conceptual understanding.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2020

ACCTING 3020 3 credits
Intermediate Accounting II
Detailed coverage of liabilities, investments, corporate accounting, the statement of cash flows, and special topics such as pensions, leases, and accounting changes. Emphasizes problem solving as well as conceptual understanding.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2020

ACCTING 3030 3 credits
Financial Accounting
Introduction to accounting concepts and procedures including the accounting cycle, assets, liabilities, and financial statements. Develops the ability to use accounting information for decision making.
Components: Lecture

ACCTING 3040 3 credits
Federal Income Tax
Survey and practical application of federal income tax regulations and court rulings to individuals and sole proprietorships.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2010

ACCTING 3050 3 credits
Advanced Accounting II
An in-depth coverage of business acquisitions and preparation of consolidated financial statements, plus coverage of foreign currency accounting and governmental accounting.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2010

ACCTING 3230 3 credits
Cost Accounting
Cost accounting systems for product costing along with accumulation of costs and their usage; application of accounting information for planning and control.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2020

ACCTING 3510 3 credits
Budgets and Budgetary Control
Theory and procedure of financial and operating budgets for managerial planning and controls.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2020

ACCTING 3520 3 credits
Advanced Taxation
A continuation of ACCTING 3040, covering advanced property transactions, special tax computations, corporations, partnerships, S corporations, and estate and gift taxation.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2020

ACCTING 4010 3 credits
Advanced Cost Accounting
A continuation of ACCTING 3230. Emphasis on usage of accounting information in making decisions and performance evaluations; allocation of costs for different purposes; application of quantitative methods in accounting.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2020

ACCTING 4130 3 credits
Auditing I
Standards and procedures of external auditing, including a simulated audit. Also emphasizes the auditor's decision-making process.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2020

ACCTING 4240 3 credits
Auditing II
Concepts, procedures, and auditor judgment in the areas of internal auditing and auditing for fraud. Also includes several advanced topics of external auditing.
Components: Lecture
Prereqs/Coreqs: P: Grade of “C” or better in ACCTING 4230

ACCTING 4230 3 credits
Auditing I
Standards and procedures of external auditing, including a simulated audit. Also emphasizes the auditor's decision-making process.
Components: Lecture
Prereqs/Coreqs: P: grade of “C” or better in ACCTING 2020

ACCTING 4240 3 credits
Auditing II
Concepts, procedures, and auditor judgment in the areas of internal auditing and auditing for fraud. Also includes several advanced topics of external auditing.
Components: Lecture
Prereqs/Coreqs: P: Grade of “C” or better in ACCTING 4230
ACCTING 4520 3 credits
**Accounting Theory**
A survey of the theory underlying financial accounting, the accounting standards setting environment, proposed alternate accounting practices, and current accounting issues and trends.
- Components: Lecture
- Prereqs/Coreqs: P: grade of “C” or better in ACCTING 3020

ACCTING 4940 1 - 4 credits
**Special Problems**
Supervised study of selected accounting topics.
- Components: Independent Study
- Prereqs/Coreqs: junior standing to enroll in this course

ACCTING 4990 1 - 8 credits
**Internship**
Extends the learning process by giving students a chance to apply their knowledge and skills on the job in an actual organization. Graded on a pass/fail basis.
- Components: Field Studies
- Prereqs/Coreqs: P: major in accounting and junior standing

### Agricultural Industry Courses

AGINDUS 1500 3 credits
**Introduction to Agribusiness**
Presents a background of American agriculture; interrelationships of agricultural industries; economic concepts of production, form of markets, marketing and consumption of food in the United States; principles of management; and key issues and trends in agribusiness.
- Components: Laboratory, Lecture

AGINDUS 1750 3 credits
**Equipment, Structure and Power Systems**
Trends and opportunities in mechanized agriculture; problems to illustrate the work of four major divisions of agricultural engineering; power and machinery, electrical power and processing, structures and environment, and soil and water conservation engineering practices.
- Components: Laboratory, Lecture

AGINDUS 2330 3 credits
**World Population, Food and Resources**
Examine current and future world population trends; study world food problems, nutrition, world hunger, and food supply and demand situation; analyze impact of trade and foreign aid, scrutinize economic development and analyze the impact on resources for society and individuals under various cultural, religious, economic, geographical, and political conditions.
- Components: Lecture
- GE: International Education, Social Sciences

AGINDUS 2430 3 credits
**Agricultural Marketing**
Principles and organization of agricultural marketing; market functions, structure, and organizations; commodity and branded marketing.
- Components: Lecture
- Prereqs/Coreqs: P: AGINDUS 1500

AGINDUS 2450 1 credit
**Agribusiness Professional Development I**
An introductory course for discovering personal and career goals, an exploration of the agribusiness industry, and preparation for securing an internship which is a requirement of the major. Students will explore their career interests through reading, interviewing, job shadowing, and other career exploration activities. Students will also prepare and have critiqued resumes, cover letters, and develop interviewing skills.
- Components: Lecture

AGINDUS 2500 3 credits
**Producer and Consumer Cooperatives**
Development, principles, legal basis, organization, finance, taxation, and management of agricultural, consumer, and industrial cooperatives.
- Components: Lecture
- Prereqs/Coreqs: P: AGINDUS 1500

AGINDUS 2920 2 credits
**Introduction to Agricultural and Extension Education**
An introduction to the origin, organizational structure, and scope of the Agricultural Extension Service and to education in agriculture; trends in these programs and the training requirements and professional opportunities associated with these trends.
- Components: Lecture

AGINDUS 3410 3 credits
**Agricultural Consulting and Sales**
The history, image, and economic importance of agricultural sales and consulting are emphasized; the nature and functions of contemporary, professional sales consulting; and the selling process, as it applies to agricultural inputs and the food and fiber industry. Current issues facing the industry.
- Components: Lecture
- Prereqs/Coreqs: P: AGINDUS 1500 and ACCTING 2010

AGINDUS 3420 3 credits
**Agricultural Finance**
Capital and credit needs of farmers, agencies supplying credit needs, farm loan analysis, budgeting and capital investment analysis.
- Components: Lecture
- Prereqs/Coreqs: P: AGINDUS 1500 and ACCTING 2010

AGINDUS 3430 3 credits
**Quantitative Methods in Farm and Agribusiness**
This course provides both introduction to and application of the quantitative tools often used in farm and agribusiness decision-making. The toolbox will include sampling and survey design, regression, correlation, tests for dependence, hypothesis testing, simulation, optimization, and others. Review interpretation of agricultural statistics and journal articles.
- Components: Lecture
- Prereqs/Coreqs: P: AGINDUS 1500 and MATH 1830
AGINDUS 3450 1 credit
**Agribusiness Professional Development II**
Professional and career development towards obtaining career objectives. Course objectives include planning and development of credentials needed to compete for a job position, learning how to package credentials and communicate them to prospective employers, and further developing professional skills and knowledge such as agribusiness ethics, etiquette, changing trends, and current events in the industry. A primary course activity is the development of a personal portfolio that showcases special achievements in being visionary, managing budgets, communication, professionalism and stewardship of people.
Components: Lecture
Prereqs/Coreqs: P: AGINDUS 1750 and junior standing

AGINDUS 3460 3 credits
**Farm Management and Record Systems**
The study of and application of farm business management systems including planning, budgeting, implementing and control; farm business arrangements and generational transfer; managing capital and human resources; tax management; record systems; farm business analysis and benchmarking; government programs; and environmental stewardship.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGINDUS 1500

AGINDUS 3500 3 credits
**Agricultural Prices and Risk Management**
Analysis of agricultural price trends; elasticity of demand and supply; seasonal prices; and price cycles, and price management tools and strategies. Understanding the theory of demand and supply; how they change; and the impact on agricultural prices. Understanding and applying the concepts of risk and risk management with special emphasis on price risk management.
Components: Lecture
Prereqs/Coreqs: P: AGINDUS 2430

AGINDUS 3520 3 credits
**Agricultural Law**
An introduction to the historical background of law and legal institutions; various legal contracts; law pertaining to real and personal property; landlord and tenant arrangements; agricultural business arrangements, partnerships, corporations, and cooperatives; legal aspects of sales transactions; legal aspects of credit; governmental regulatory agencies.
Components: Lecture
Prereqs/Coreqs: P: AGINDUS 1500

AGINDUS 3530 3 credits
**Agricultural Commodity Marketing**
Current marketing trends and problems, futures marketing and forward contracting, bargaining, international trade, current marketing issues of selected agricultural commodities.
Components: Lecture
Prereqs/Coreqs: P: AGINDUS 2430 or BUSADMIN 3620

AGINDUS 3830 3 credits
**Engines and Tractor Systems**
Operating principles, maintenance, adjustment, and testing of gas and diesel engines used in agriculture. Analysis of tractor and power transmission systems.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGINDUS 1750 or consent of instructor

AGINDUS 3850 3 credits
**Electrical Applications in Agriculture**
Elementary electricity; planning of farmstead electrical systems; selection, operation, and maintenance of electrical equipment; application of electricity to heat, light, and power; emergency power generation.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGINDUS 1750 or consent of instructor

AGINDUS 3900 3 credits
**Planning Cooperative Education in Agriculture**
Determination of general program objectives and planning for the administration of all facets of the program, including curriculum development, instructional facilities and materials; supervised Agricultural Experience Programs, and the F.F.A. Program of Activities.
Components: Lecture

AGINDUS 3950 3 credits
**Soil and Water Conservation Engineering**
Land description and characteristics of watersheds. Design, layout, and construction of waterways, diversions, terraces, and earthen structures.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGINDUS 1750 or AGSCI 2230 or RECLAM 1010 or consent of instructor

AGINDUS 4120 3 credits
**The Animal Rights and Animal Welfare Social Movements**
Students will learn about the past and present actions of the animal rights and animal welfare movements and will be expected to theorize using facts on what the future may hold if each movement continues ahead. Emphasis will be placed on class debates, mature discussions/interactions, fact-finding assignments and a major project researching individuals that have been influential to either movement or how they have impacted the opposing movement.
Components: Discussion, Lecture
Cross Offerings: AGSCI 4120

AGINDUS 4330 3 credits
**Agribusiness Marketing Management**
Development of a marketing plan; review and work with media; advertising and promotional programs; merchandising strategies; financial market and demographic research and analysis; pricing and product strategies for agricultural (food and inputs) products.
Components: Lecture
Prereqs/Coreqs: P: AGINDUS 1500 and AGINDUS 2430

AGINDUS 4400 3 credits
**Livestock and Meat Marketing**
Economic analysis of principles and methods of marketing, evaluating, and pricing meat animals, and the marketing and merchandising of meat and meat products for the beef, pork and poultry industries.
Components: Lecture
Prereqs/Coreqs: P: AGINDUS 1500 and AGINDUS 2430
AGINDUS 4460 3 credits
**Agricultural Policy Seminar**
The making of Agricultural, Food, Rural, and Environmental Policy including history, process, political dynamics, and players; the current state of legislative developments; and an evaluation of the economic, environmental, and social impacts of current and alternative policy.

- Components: Seminar
- Prereqs/Coreqs: P: AGINDUS 1500

AGINDUS 4500 3 credits
**Agribusiness Management**
Management of the agribusiness firm including planning, organizing, coordinating, control and communication. Special emphasis is given to learning and decision-making through case studies including financial analysis, investments, organizational structure, etc.

- Components: Lecture
- Prereqs/Coreqs: P: AGINDUS 1500

AGINDUS 4580 3 - 6 credits
**Agricultural Business Internship**
Supervised program of study in cooperation with agricultural industries and public agencies for credit in all majors.

- Components: Field Studies
- Prereqs/Coreqs: P: 30 credits and 2.00 GPA

AGINDUS 4590 1 - 3 credits
**Individual Study in the Agricultural Industries**
Advanced study on a particular topic or problem in the area of specialization within the agricultural industries.

- Components: Independent Study

AGINDUS 4600 3 credits
**Faculty Led Short-Term International Experience in Agriculture**
Extended trip and study of various agricultural practices, topics and cultures. Course may include topics related to climate, economics, agribusiness, policy, geography, soils, landscapes, markets, crops, livestock and cultural diversity. Location and duration of travel courses will vary. Expenses will be paid by student. Pre and Post-trip sessions will be arranged. Check with School of Agriculture for current offerings.

- Components: Field Studies
- Cross Offerings: AGSCI 4600
- GE: International Education

AGINDUS 4620 2 credits
**Agricultural Commodity Price Forecasting**
Analyze basic commodity price fluctuations. The three major approaches include technical, fundamental, and behavioral analyses. Primary emphasis involves charting theory.

- Components: Lecture
- Prereqs/Coreqs: P: AGINDUS 1500, AGINDUS 2430, and AGINDUS 3530

AGINDUS 4690 3 credits
**Hydraulics and Machinery Engineering**
Hydraulic principles, components, and systems. Management, operation, adjustment, and maintenance of agricultural machinery.

- Components: Laboratory, Lecture
- Prereqs/Coreqs: P: AGINDUS 1750 or consent of instructor

AGINDUS 4790 3 credits
**Materials Handling and Energy Seminar**
Principles and applications of handling agricultural products. Sales, service, employment opportunities, and special problems relating to agricultural, environmental, and energy systems.

- Components: Laboratory, Seminar

AGINDUS 4890 3 credits
**Structures and Environmental Control**
Planning and construction of agricultural buildings with respect to functions, aesthetic and environmental aspects; construction components; material utilization; moisture and heat transmission; ventilation system design; and physiological effects of environment on animals and crops.

- Components: Laboratory, Lecture
- Prereqs/Coreqs: P: AGINDUS 1750 or consent of instructor

AGINDUS 4930 3 credits
**Teaching Cooperative Education in Agriculture**
Application of the teaching-learning process to education in agriculture, including methods of instruction, the computer and other instructional media, preparation of teaching plans, and experiencing teaching through role playing.

- Components: Lecture
- Prereqs/Coreqs: P: AGINDUS 3900 or senior standing

AGINDUS 4990 1 - 3 credits
**Independent Study in Equipment, Structure and Power Systems**
Advanced study in an area of specialization.

- Components: Independent Study
- Prereqs/Coreqs: P: junior standing

---

**Agricultural Science Courses**

AGSCI 1000 3 credits
**Introduction to Animal Science**
The organization and structure of the nation's livestock and poultry industries; the variety and nature of animal food products; the biological uniqueness of farm animals; profitable management practices as they apply to commercial animal production.

- Components: Lecture

AGSCI 1200 2 credits
**Animal Science Management**
The performance and management skills necessary to manage productive livestock enterprises. Students will learn techniques necessary in production agriculture.

- Components: Lecture

AGSCI 1240 3 credits
**The Plant-Soil Environment**
This class introduces students to the basic principles of plant science as they relate to Crop and Soil Science, and Ornamental Horticulture. Topics include plant identification, classification and structure, the influence of genotypic, environmental and plant-soil interrelationships on vital plant developmental processes, and the impact of cultural practices, pests and diseases on the growth and development of important agronomic and horticultural species.

- Components: Laboratory, Lecture
AGSCI 1260 3 credits
Crop Science
Basic principles of crop production which include classification and identification, morphology, anatomy, physiology, climatology, plant-soil interrelationships, cultural practices, harvesting, cropping systems, and management.
Components: Lecture

AGSCI 2000 3 credits
Meat and Animal Evaluation
The evaluation of beef, dairy-beef, sheep, and swine market animals for carcass merit; utilizing performance records in the evaluation and selection of breeding animals.
Components: Laboratory, Lecture

AGSCI 2020 3 credits
Introduction to Dairy Science
Selection, feeding, and care of dairy cattle.
Components: Lecture

AGSCI 2030 3 credits
Introduction to Food Science
The organization and structure of the nation’s food industry. The nature and value of the major food groups, physical and chemical properties of various foods, processing technology, food safety, and quality assurance.
Components: Laboratory, Lecture

AGSCI 2050 3 credits
Dairy Cattle Evaluation
Problems in evaluating dairy cattle, emphasizing utility as well as show ring requirements. Students will familiarize themselves with alternative evaluation methods.
Components: Lecture

AGSCI 2230 4 credits
Soils
Origin, nature, and environment for plants; productivity as influenced by soil, cropping system, and management.
Components: Laboratory, Lecture

AGSCI 2280 3 credits
Woody Landscape Plants
The identification, propagation, and use of woody ornamental plants important to Midwestern landscapes including deciduous and evergreen trees, shrubs, and ground covers.
Components: Lecture
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 2600 3 credits
Companion Animal Care and Management
Basic principles and practices of companion animals will be discussed. Application of knowledge and theories to actual case studies will be expected. A service learning project will be required of each student. Topics include defining companion animals, feeding and nutrition, reproductive biology, animal behavior and health.
Components: Lecture
Prereqs/Coreqs: sophomore standing to enroll in this class

AGSCI 3000 4 credits
Animal Nutrition
Practical application of nutrition principles to livestock feeding; the characteristics of feeds; practice in formulating rations and studies of their relative economy in the management of herds and flocks.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1000 and either CHEMISTRY 1050 or CHEMISTRY 1140

AGSCI 3010 3 credits
Dairy Product Analysis and Processing
The testing of milk and dairy products; elements of the manufacture of various dairy products in relation to quality milk production on the farm.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: CHEMISTRY 1050 or CHEMISTRY 1140

AGSCI 3020 3 credits
Anatomy and Physiology of Domestic Animals
The anatomy and physiology of farm animals.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1000

AGSCI 3030 3 credits
Genetics of Livestock Improvement
Qualitative and quantitative genetics and their application to the breeding and improvement of domestic animals.
Components: Lecture
Prereqs/Coreqs: P: BIOLOGY 1150 or BIOLOGY 1350 or BIOLOGY 1650

AGSCI 3040 3 credits
Principles of Meat Science
Structure and composition of skeletal and connective tissue; post mortem changes affecting meat quality and characteristics.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1000, CHEMISTRY 1050 or BIOLOGY 1650

AGSCI 3070 3 credits
Biotechnology in Animal Science
Principles of current methodologies utilized in biotechnology and the specific application to areas of animal science will be presented.
Components: Lecture

AGSCI 3120 3 credits
Topics in Animal Health
Discusses farm animal diseases specific for this area along with diseases controlled by governmental regulations. Field trips both on farms and at the university farm will demonstrate post mortems, surgery, physical exams, and other problems of farm animals. Reproduction and mastitis in dairy cows will be covered in lectures and field trips.
Components: Lecture
AGSCI 3200 3 credits
**Pest Identification and Management**
The basic principles of weed, insect, and disease pest identification and integrated pest management (IPM) in agricultural and urban environments involving biological, cultural, and chemical control of pests as it relates to production decisions, environmental impacts, and management of pest resistance.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 3220 4 credits
**Plant Development and Biotechnology**
Students will use the methods of science as employed through plant cell culture and biotechnology to explore the development of plant tissues and organs in vitro. Topics include plant anatomy and growth regulators, development of axillary and adventitious shoots, direct and indirect somatic embryogenesis, the use of biotechnology for plant improvement, and biometric statistical analysis and data interpretation. Students will be expected to review and critique published scientific articles as well as statistically analyze data and write interpretive papers based on results gained from experiments conducted in the laboratory. This is an intensive writing course.
Components: Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 3230 3 credits
**Turfgrass Management**
The basic principles and practices involved in the establishment and maintenance of turfgrass species.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 3240 2 credits
**Herbaceous Plants**
Identification, use, management and propagation of herbaceous annual, biennial and perennial plant species important in Midwest landscapes will be discussed.
Components: Lecture
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 3260 3 credits
**Seed and Grain Crops**
Principles and practices used in the production and evaluation of seed for sale and commercial market grain crops.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240

AGSCI 3270 3 credits
**Landscape Design**
An exploration of the basic principles and practices of landscape design including the art of landscapes, comprehensive site analysis and base map preparation, design principles, understanding and respect for the plant materials in landscapes, graphic skills and preparation of landscape drawings.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 2280 or consent of instructor

AGSCI 3300 3 credits
**Fruit and Vegetable Production**
The basic principles and practices involved in the production and marketing of temperate zone vegetables, tree fruits, and small fruits.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 3310 1 credit
**Soils, Crops and Ornamental Horticulture Seminar**
Review of current literature.
Components: Seminar
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 3320 3 credits
**Landscape Management**
The theories and practices that support horticultural principles as applied to the management of plants and landscapes in the Midwest will be discussed. Topics include landscape design and grounds management, pruning, irrigation and nutrient management, integrated pest management as well as marketing landscape services, and estimating and preparing job bids. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 2280 or consent of instructor

AGSCI 3330 3 credits
**Soil Morphology and Classification**
Morphology and classification of soils, interpreting and using soil survey information, describing and mapping soil properties.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 2230

AGSCI 3340 3 credits
**Nutrient Management in Agriculture**
Agriculture as it affects and is affected by the quality of our environment.
Components: Lecture
Prereqs/Coreqs: P: AGSCI 1240 or AGSCI 2230 or consent of instructor

AGSCI 3350 3 credits
**Soil Fertility and Fertilizers**
In-depth exploration of the physical, chemical, and biological properties of soils in relation to productivity and management. Discussion of the use, composition, and production of soil amendments including lime, fertilizers, and manure. Laboratory techniques for soil testing and interpretations of soil test results.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 2230 and CHEMISTRY 1050 or CHEMISTRY 1140 or CHEMISTRY 1450

AGSCI 3360 3 credits
**Greenhouse Operation and Management**
The basic principles and practices involved in the production and marketing of commercial greenhouse flower crops, foliage plants, and bedding plants.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor
AGSCI 3370 1 - 3 credits
**Undergraduate Research in Ornamental Horticulture**
Students conduct research projects with faculty in Ornamental Horticulture or Plant Biotechnology.
Components: Independent Study
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor.

AGSCI 3380 1 - 3 credits
**Special Problems in Soil Science**
Individual study in specialized areas of soils.
Components: Independent Study
Prereqs/Coreqs: P: AGSCI 2230

AGSCI 3390 1 - 3 credits
**Special Problems in Crop Science**
Crop experimentation or research interpretation in breeding, physiology, crop production, or crop chemicals.
Components: Independent Study
Prereqs/Coreqs: P: AGSCI 1240 or consent of instructor

AGSCI 3400 1 - 3 credits
**Special Topics in Ornamental Horticulture**
Discussion of contemporary topics relevant to the field of Ornamental Horticulture.
Components: Independent Study
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 3600 3 credits
**Ration Formulation/Evaluation**
Basics of ration formulation and evaluation. Formulation using different methods with major emphasis on computer programs. Evaluation using case studies of herds with nutritional problems.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240 or consent of instructor

AGSCI 4030 4 credits
**Beef Management**
Management principles of beef production including selection, feeding, marketing, reproduction, and promotion.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 3000 or consent of instructor

AGSCI 4040 4 credits
**Swine Management**
The management principles and practices of the pork industry which include selection, feeding, breeding, reproduction, housing, disease control, and handling are discussed and demonstrated. The student is introduced to the organizational structure, economic realities and production trends current in the industry.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 3000 or consent of instructor

AGSCI 4070 4 credits
**Dairy Cattle Management**
Principles and problems involved in dairy cattle management. Emphasis will be placed on actual involvement in making managerial decisions.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 2020 and AGSCI 3000 or consent of instructor

AGSCI 4080 3 credits
**Ruminant Nutrition**
Anatomy and physiology of the ruminant gastrointestinal tract; the digestion, absorption, metabolism, utilization, and biochemical functions of nutrients as applied to ruminants.
Components: Lecture
Prereqs/Coreqs: P: AGSCI 3000

AGSCI 4090 3 credits
**Monogastric Nutrition**
Digestion, absorption, and metabolism of nutrients in monogastrics. Nutrition of protein, energy, fat, minerals, vitamins, and feed additives for swine, horses, and poultry. Practical application and ration balancing for each species studied.
Components: Lecture
Prereqs/Coreqs: P: AGSCI 3000

AGSCI 4110 4 credits
**Reproductive Physiology of Domestic Animals**
This course discusses the anatomy, physiology and basic endocrinology of the reproductive processes in domestic livestock, companion animals, and poultry. Reproductive similarities and differences in humans will also be discussed. Methods available for enhancing or controlling reproductive processes in mammals will be discussed including the use of artificial insemination, estrous synchronization, embryo transfer, and reproductive biotechnology. The effects of environment, nutrition, and disease will also be examined for their influences on reproduction.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1150 or BIOLOGY 1650 or BIOLOGY 1750 or consent of instructor

AGSCI 4120 3 credits
**The Animal Rights and Animal Welfare Social Movements**
Students will learn about the past and present actions of the animal rights and animal welfare movements and will be expected to theorize using facts on what the future may hold if each movement continues ahead. Emphasis will be placed on class debates, mature discussions/interactions, fact-finding assignments and a major project researching individuals that have been influential to either movement or how they have impacted the opposing movement.
Components: Discussion, Lecture
Cross Offerings: AGINDUS 4120
Prereqs/Coreqs: junior standing to enroll in this course

AGSCI 4130 3 credits
**Mammalian Endocrinology**
The structural and functional classification of hormones, principles of hormone action, and the regulation of body functions by the endocrine system with emphasis on homeostasis.
Components: Lecture
Cross Offerings: BIOLOGY 4130
AGSCI 4140 3 credits
**Meat Processing**
This course is an advanced meat science course in which students will be expected to use their basic meat science knowledge and apply it to the production of further-processed, value-added meat products (i.e., sausages, bacon, hams). In addition to advanced meat processing skills, students will be expected to follow and adhere to HACCP and SSOP food safety standards in the production of the various products.

Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 3040 or instructor consent

AGSCI 4150 3 credits
**Biology of Lactation**
Basic anatomy, physiology, endocrinology, and biochemistry of the mammary gland; factors affecting milk yield and composition; diseases and abnormalities of the mammary gland; and principles and mechanics of milking machines.

Components: Lecture
Prereqs/Coreqs: P: BIOLOGY 1150 or BIOLOGY 1650 or BIOLOGY 1750 or consent of instructor.

AGSCI 4190 2 credits
**Seminar in Animal Science and Biotechnology**
Preparation and presentation of oral and written reports on timely topics involving commercial animal production and/or advancements in biotechnology as they may apply to animal science.

Components: Seminar
Prereqs/Coreqs: P: senior or junior level standing or consent of the instructor

AGSCI 4200 1 - 3 credits
**Individual Study in Animal Science**
Individual study of the literature and research in specialized areas of the animal sciences.

Components: Independent Study

AGSCI 4240 3 credits
**Plant Breeding Principles**
The basic methods and principles involved in field and horticultural crop improvement with emphasis on plant reproduction and pollination methods, selection schemes, and gene action considerations. Major crop species will be emphasized.

Components: Lecture
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 4250 3 credits
**Weed Science**
Identification of weeds; chemical, biological and cultural methods of control; influence on production.

Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240 or consent of instructor

AGSCI 4260 3 credits
**Interior Plants**
This course discusses the basics of interior plant culture including the important foliage and flowering plant species used in interior plantscapes, common propagation and production techniques, plant quality evaluation plus design, installation and maintenance of plants in interior settings.

Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 4320 3 credits
**Forage Crops**
Plants that provide feed for domestic animals, particularly emphasizing the methods of production and management of grass and legume crops and the harvesting and processing of quality hay, pastureage, and silage.

Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240 or AGSCI 1000 or consent of instructor

AGSCI 4340 3 credits
**Plant Physiology**
Fundamentals of plant physiology including plant cellular constituents and their biosynthesis, photosynthesis, respiration, plant water relations, mineral nutrition, and assimilation of inorganic nutrients, transport processes in plant cells and tissues, physiological effects of plant hormones, and the physiological aspects of vegetative growth and plant reproduction.

Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 1240 or BIOLOGY 1350 or consent of instructor

AGSCI 4350 3 credits
**Soil and Water Conservation**
The application of physical, chemical, and biological principles to soil and water conservation.

Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 2230

AGSCI 4370 3 credits
**Soil Physics**
Physical properties, moisture relations, and methods of physical analysis of soil with respect to soil structure, soil water, soil air, and soil temperature.

Components: Laboratory, Lecture
Prereqs/Coreqs: P: AGSCI 2230

AGSCI 4600 3 credits
**Faculty Led Short-Term International Experience in Agriculture**
Extended trip and study of various agricultural practices, topics and cultures. Course may include topics related to climate, economics, agribusiness, policy, geography, soils, landscapes, markets, crops, livestock and cultural diversity. Location and duration of travel courses will vary. Expenses will be paid by student. Pre and Post-trip sessions will be arranged. Check with School of Agriculture for current offerings.

Components: Field Studies
Cross Offerings: AGINDUS 4600
GE: International Education
Art Courses

ART 1010 2 credits
Drawing I: Basic Drawing
Introduction to the basic problems of composition and representation of drawing using a variety of professional media and techniques.
Components: Lecture

ART 1230 3 credits
Art and Children's Literature for Teachers
Children's development in art from birth through elementary school level; basic theories and practice for presenting art understanding and activities in the classroom. Using literature and illustration as the context for teaching art and teaching with art. (Not for art majors)
Components: Lecture
GE: Fine Arts

ART 1240 3 credits
Art and Social Studies for Teachers
Focus on art in the classroom. Children's development in art and uses of materials appropriate for children through elementary. Assignments and projects will make use of the content of social studies and multiculturalism.
Components: Lecture
GE: Fine Arts

ART 1310 2 credits
Drawing II: Styles
The study of various methods of visual representation exploring the stylistic possibilities of textures, contours and linear pattern.
Components: Lecture

ART 1420 2 credits
Basic Design I: 2-D
Introduction to the elements and fundamental concepts of two dimensional visual arts. For first year art majors.
Components: Lecture

ART 1520 2 credits
Basic Design II: 3-D
Introduction to the elements of three dimensional visual arts. For first year art majors.
Components: Lecture

ART 1630 3 credits
Lettering and Typographical Design
The fundamentals of lettering, typography and typographic design as an art form. Emphasis on the origins and history of the alphabet, type, and their relationship to art and communication. Practice in the structure of letters, designing with type, and the word as a means of visual communication.
Components: Lecture

ART 1710 2 credits
Painting I: Beginning Painting
Preparations for painting stressing the tools, techniques and principles of painting.
Components: Lecture

ART 1740 3 credits
Introduction to Digital Media
Introduction to and exploration in Macintosh computer graphics art media; specifically drawing, painting, page layout, and image manipulation applications used in other art courses. Basic computer art terminology and principles are introduced through class lectures with corresponding assignments given. Introduction to computer art hardware and peripheral devices. Lecture and studio course instruction format.
Components: Lecture
Prereqs/Coreqs: P: ART 1420 and ART 1520

ART 2010 2 credits
Drawing IV: Intermediate Drawing
Drawing IV students will learn to expand visual awareness and develop their control of drawing as a tool for research and invention. Drawing problems progress from simple structural analysis to more sophisticated exploration of subject matter and finally to individual interpretation. Drawing media applications and exercises are expanded in this intermediate level class.
Components: Lecture
Prereqs/Coreqs: P: ART 2020

ART 2020 2 credits
Drawing III: Figure Drawing
Drawing the human figure with emphasis on anatomy, structure, composition, and form.
Components: Lecture
Prereqs/Coreqs: P: ART 1010 and ART 1310

ART 2140 3 credits
Art History I: Ancient and Medieval
The history of western art from ancient times through Gothic period.
Components: Lecture
GE: Fine Arts

ART 2210 3 credits
Art History II: Renaissance to 1879
The history of art from the Renaissance to the beginning of Realism in the 19th century.
Components: Lecture
GE: Fine Arts

ART 2240 3 credits
Illustration I
Exploration of various basic illustration media and techniques. Includes skill, visualization and conceptualization development as well as investigations of relationship between illustration, as an individual art form, and graphic design applications.
Components: Lecture
Prereqs/Coreqs: P: ART 1420 and ART 1520

ART 2330 3 credits
Illustration II
Continued investigations of various illustration media and techniques, as well as exploration of additional media. Includes further conceptual and skill development of illustration methods as an art form and investigations of the relationship between illustration and graphic design applications.
Components: Lecture
Prereqs/Coreqs: P: ART 2410 and ART 2240
ART 2410 2 credits  
**Painting II: Intermediate Painting**  
A continuation of ART 1720.  
Components: Lecture  
Prereqs/Coreqs: P: ART 1710 and ART 1010

ART 2430 3 credits  
**Art Survey**  
A general introduction to the visual arts, including art history, basic principles of design, and the role of creative art both for the individual and in society. Designed to provide guidance in understanding art of all periods and places. (Not for art majors)  
Components: Lecture  
GE: Fine Arts

ART 2490 2 credits  
**Painting III: Figure Painting**  
Painting III explores the human figure in form, proportion and anatomy in studio. Students study action, volume, scale, design and expressive potential of human form. Formal aspects of painting are studied through intensive observation of live models.  
Components: Lecture  
Prereqs/Coreqs: P: ART 2410 and ART 2020

ART 2500 1 - 3 credits  
**Topics in Art**  
The study of selected topics common to visual art discipline s. The topic to be covered will be identified in the course title.  
Components: Lecture

ART 2510 2 credits  
**Sculpture I: Basic**  
Introduction to the concepts and media of three dimensional art.  
Components: Lecture  
Prereqs/Coreqs: P: ART 1520

ART 2520 2 credits  
**Ceramics I**  
Hand and wheel methods in clay production, glazing and firing.  
Components: Laboratory

ART 2620 2 credits  
**Ceramics II**  
Continuation of Art 2520, stressing use of the pottery wheel.  
Components: Laboratory  
Prereqs/Coreqs: P: ART 2520

ART 2710 3 credits  
**Graphic Design I: Lettering and Typographic Design**  
Introduction to the art and techniques of typographical design and applications to graphic design.  
Components: Lecture  
Prereqs/Coreqs: P: ART 1420

ART 2730 3 credits  
**Native American Art**  
Art of various culture groups of American Indians, ranging from the Inuit of the far north to tribes and nations of the southwest. Ancient and traditional art forms will be studied as well as history of art in times of culture contact and conflict, continuing through work created by contemporary tribal artists informed by those traditions.  
Components: Lecture  
Cross Offerings: ETHNSTDY 2730  
GE: Ethnic Studies, Fine Arts

ART 2920 2 credits  
**Crafts I: Fibers and Fabrics**  
Construction using fiber and fabrics; fabric making, and decorating; weaving, printing and related media.  
Components: Laboratory

ART 3020 1 - 3 credits  
**Studies in Art I**  
Concentrated study in the specific area of studio, which is indicated in the current class schedule. May be repeated under different headings.  
Components: Laboratory

ART 3030 3 credits  
**Studies in Art II**  
Concentrated study in a specific area of art which is indicated in the current class schedule. May be repeated under different headings.  
Components: Lecture

ART 3040 3 credits  
**Art Education and Social Studies**  
Focus on art in the classroom. Children's development in art and uses of materials appropriate for children up through middle school level. Assignments and projects will make use of the content of social studies and multiculturalism.  
Components: Lecture  
GE: Fine Arts

ART 3110 3 credits  
**Drawing V: Perspective Drawing**  
Detailed studies of ways in which principles of perspective are used to represent objects in space.  
Components: Lecture

ART 3120 2 credits  
**Art Education I: Elementary Education**  
Children's art through the various age levels and the basic theories and practices of teaching art on the elementary and middle school level. For students planning to teach only in the elementary grades. (not for art majors)  
Components: Lecture
ART 3140  2 credits
**Drawing VI: Advanced Drawing**
Advanced problem-solving in drawing requiring high degree of visual refinement with emphasis on understanding media potential. Use of still life and figure forms in studio. Further investigation of principles concerning complex forms and light with the use of advanced media. Independent studio work component.
Components: Lecture
GE: Fine Arts
Prereqs/Coreqs: P: ART 1310

ART 3220  2 credits
**Printmaking I**
Relief printing and intaglio.
Components: Laboratory, Lecture

ART 3320  2 credits
**Printmaking II**
Advanced printing processes.
Components: Laboratory

ART 3340  3 credits
**Art History III: Modern**
The history of modern art from Realism to the present showing the development of the important ideas and styles in art and architecture.
Components: Lecture
GE: Fine Arts

ART 3410  2 credits
**Painting IV: Advanced Painting**
A continuation of ART 2410 and ART 2490.
Components: Lecture
Prereqs/Coreqs: P: ART 2490

ART 3510  2 credits
**Sculpture II: Intermediate**
Sculpting heads of humans, animals and aliens to experience clays, conditioning clay, camera, calipers and ruler, measurement charts, modeling tools, hollowing out tools, armatures, turntables, sculpture stand, kiln and patina.
Components: Lecture
Prereqs/Coreqs: P: ART 2510

ART 3530  3 credits
**Art History V: Far Eastern Art**
A survey of the art of China, India and Japan.
Components: Lecture
GE: Fine Arts, International Education

ART 3610  2 credits
**Crafts II: Jewelry**
Basic techniques in jewelry design and production.
Components: Lecture

ART 3710  2 credits
**Painting VI: Watercolor**
An introduction to various methods of water color painting.
Components: Lecture

ART 3740  3 credits
**Graphic Design V: History and Systems**
A history of graphic design in the visual arts, the role of the graphic artist and designer, and practical experience in the use of the design systems.
Components: Lecture

ART 3800  2 credits
**Ceramics III: Advanced**
Advanced work in clay construction, stressing individual projects.
Components: Laboratory
Prereqs/Coreqs: P: ART 2520 and ART 2620

ART 3910  2 credits
**Graphic Design III: Advanced Typography**
Advanced studies into the art and techniques of typographical design and applications to graphic design.
Components: Lecture
Prereqs/Coreqs: P: ART 2710

ART 4030  3 credits
**Graphic Design IV: Advanced Graphic Design Studio**
Continuation of studio techniques and advanced concepts for graphic design based on further exploration of formal values in design and their relation to advanced visual communication.
Components: Lecture
Prereqs/Coreqs: P: ART 2740

ART 4230  3 credits
**Theory of Art**
A survey of the theory of art with an emphasis on contemporary ideas.
Components: Lecture
GE: Fine Arts

ART 4510  2 credits
**Sculpture III: Advanced, Materials and Techniques**
Advanced work in sculpture with special emphasis on the casting of metal sculpture and foundry methods, techniques and preparations for casting.
Components: Lecture
Prereqs/Coreqs: P: ART 2510 and ART 3510

ART 4530  3 credits
**Art Education II: Elementary and Middle Methods**
Teaching of art on the elementary and middle school level. A study of physical plants, supplies, and unit plans. (For students majoring in art education)
Components: Lecture

ART 4630  3 credits
**Art Education III: Middle and High School Methods**
A continuation of Art 4530 with an emphasis on the teaching and supervision of art in middle and high school. (For students majoring in art education) Should be taken simultaneously with Teaching 3910.
Components: Lecture
Prereqs/Coreqs: P: junior standing
ART 4660  1 - 8 credits
**Cooperative Field Experience**
Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and department.
Components: Field Studies

ART 4700  2 - 3 credits
**Independent Work in Design**
Advanced work on design projects chosen by the student.
Components: Independent Study
Prereqs/Coreqs: P: ART 1420 and ART 1520

ART 4710  2 - 3 credits
**Independent Work in Drawing**
Drawing as an independent creative medium.
Components: Independent Study
Prereqs/Coreqs: P: ART 1310

ART 4720  2 - 3 credits
**Independent Work in Printmaking**
Advanced work in printmaking media elected by the student.
Components: Independent Study
Prereqs/Coreqs: P: ART 3220

ART 4730  2 - 3 credits
**Independent Work in Painting**
Advanced painting in media elected by the student.
Components: Independent Study
Prereqs/Coreqs: P: 6 credits in painting and ART 2410

ART 4740  2 - 3 credits
**Independent Work in Ceramics**
Advanced work on projects chosen by the student.
Components: Independent Study
Prereqs/Coreqs: P: ART 3510

ART 4750  2 - 3 credits
**Independent Work in Sculpture**
Advanced work on sculpture projects chosen by the student.
Components: Independent Study

ART 4760  2 - 3 credits
**Independent Work in Sculpture Casting**
Advanced work on sculpture projects chosen by the student.
Components: Independent Study

ART 4770  2 - 3 credits
**Independent Work in Crafts**
Independent creative work in craft areas chosen by the student.
Components: Independent Study

ART 4780  2 - 3 credits
**Independent Study in Art History**
Independent research on specialized problems.
Components: Independent Study
Prereqs/Coreqs: P: ART 2140 or ART 2210

ART 4790  2 - 3 credits
**Independent Study in Art Education**
Independent research on problems in art education. For students majoring in art education.
Components: Independent Study
Prereqs/Coreqs: P: ART 3120 and ART 4530

ART 4800  3 credits
**Painting V: Materials and Techniques of Painting**
Technical exploration of art media and materials used in painting and drawing applications. Traditional and contemporary methods for creating art media and tool use. Conservation and restoration issues investigated. Lecture and studio assignment instruction format.
Components: Lecture
Prereqs/Coreqs: P: ART 1720 and 4 credits in 3000 or above level art courses

ART 4930  2 credits
**Presentation and Marketing**
The basic goals of the course are to provide an understanding of the proper presentation of two and three dimensional art work as well as introduce students to marketing techniques.
Components: Lecture

ART 4950  1 credit
**Senior Art Show**
This is a directed studies course for art majors and will meet as a seminar class four times during the semester.
Components: Seminar
Prereqs/Coreqs: P: ART 4930

**Biology Courses**

BIOLOGY 1020  1 credit
**BioQuest: Foundations for College Success**
This course provides an opportunity for new students to learn about the biology program, staff, and resources available at UW-Platteville. Designed to help first-year biology students make a successful transition to college life, students will be given opportunities to develop skills to excel in and beyond college. Topics include: time management, learning styles, study and test-taking skills, responsibility and professionalism, the importance of biology-related experiences and jobs before graduation, use of electronic academic tools, curriculum requirements and registration issues, balance in life, and effective communication. (Fall, Spring)
Components: Lecture
Prereqs/Coreqs: P: Biology or related major

BIOLOGY 1150  5 credits
**General Biology**
The fundamental features of living organisms; cell and tissue structure, growth, basic physiological processes, reproduction and inheritance, classification, ecology, and evolution. Not required nor counted toward a major or a minor in biology.
Components: Laboratory, Lecture
GE: Natural Science
BIOLOGY 1350 5 credits
General Botany
Structures and functions of principal groups of plants and plant like organisms; their ecological and phylogenetic relationships.
Components: Discussion, Laboratory, Lecture
GE: Natural Science

BIOLOGY 1650 5 credits
The Unity of Life
This course is a dynamic exploration of Biology from the biochemical level through the individual organism. In this exploration students will investigate the interactions of the internal workings of the cell, the cells themselves, tissues and organ systems in the physiology of organisms from single celled bacteria through multi-cellular plants and animals. (Fall, Spring)
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: Biology or related major

BIOLOGY 1750 5 credits
The Diversity of Life
In this course the ecological and evolutionary connections between all living organisms will be explored and the following questions will be addressed: 1) Why are there so many species and how did there get to be so many? 2) How does fitness unify and diversify life? 3) How do organisms reproduce? and 4) What is the biological future of life? Organismal through ecosystem level processes will be explored. (Fall, Spring)
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: Biology or related major

BIOLOGY 2040 4 credits
Cell Biology
Organization of cells and their components; analysis of light and electron microscopy of cytoplasmic and nuclear components of the cell and their relation to heredity, physiology, reproduction and development.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and one semester of chemistry

BIOLOGY 2130 3 credits
Plants and Society
A global exploration of plants and their uses by humans from historical, cultural, economic, and botanical perspectives.
Components: Laboratory, Lecture
GE: International Education
Prereqs/Coreqs: P: BIOLOGY 1150 or BIOLOGY 1350 or BIOLOGY 1650 or BIOLOGY 1750

BIOLOGY 2140 4 credits
Anatomy and Physiology I
Designed as a two-semester sequence, this sequence explores structure (anatomy) and function (physiology) of the human body from a systematic approach. In addition to introductory materials, this semester includes study of the Integumentary, skeletal, muscular and nervous systems. Throughout the semester, systems will be analyzed at the molecular, cellular, tissue, organ and organ system levels.
Components: Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: BIOLOGY 1650 or consent of instructor

BIOLOGY 2240 4 credits
Anatomy and Physiology II
Continued study of the structure and function of the human body including the sensory, endocrine, digestive, respiratory, cardiovascular, lymphatic, urinary, and reproductive systems. Applications to health and physical education.
Components: Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: BIOLOGY 2140 (grade of “C” or better required)

BIOLOGY 2250 3 credits
Tropical Marine Ecosystems
This course is built around a three week summer field course based at the University of the South Pacific's Marine Studies Program, taught by experts in their field at UWP and USP. Topics for study will include tropical marine environment, communities, and conservation. There will be several required field excursions.
Components: Lecture
Cross Offerings: GEOGRPHY 2250
GE: International Education, Natural Science

BIOLOGY 2340 4 credits
Essentials of Anatomy and Physiology
As a one semester offering, this course is designed to cover the essentials of human anatomy and physiology. It will serve as a basic introduction to the study of the complex interdependence of structure and function from a systematic approach. All primary body systems will be addressed.
Components: Laboratory, Lecture
GE: Natural Science

BIOLOGY 2420 2 credits
Fundamentals of Biological Investigations
This course illustrates the process of science from a biological perspective. Students will learn to design, execute, analyze, and present biological research. Through a combination of readings, discussions, projects, lab exercises, and field work students will experience the challenges and rewards of acquiring biological information. (Fall, Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1020 and BIOLOGY 1650 and BIOLOGY 1750 and ENGLISH 1130 and ENGLISH 1230

BIOLOGY 2450 4 credits
Fungi, Algae and Bryophytes
This course covers the major groups of living algae, fungi, fungal-like protists, and bryophytes. Although classic concepts of taxonomy, evolution, morphology, and ecological and economic importance will be included in this diversity survey course, the material will be presented from a community ecology approach: which organisms would be located in a particular environment and why? Lectures will be standard lecture as well as discussion format. Labs will include a variety of essential techniques for studying these diverse organisms, such as microscopy, use of identification keys, field sampling, collection/processing, and culturing. (Fall, odd years)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1350 or (BIOLOGY 1650 and BIOLOGY 1750). C: SPEECH 1010, BIOLOGY 3450 recommended
BIOLOGY 2640 4 credits  
**Invertebrate Zoology**
Systematic survey of the invertebrates. Both representative and diverse forms will be studied within each group. Includes animal micro-technique procedures.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and BIOLOGY 1750 or consent of instructor

BIOLOGY 3030 3 credits  
**Ornithology**
Anatomy, physiology, life histories, and environmental relationships of birds. Laboratory study and field trips.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1750 and BIOLOGY 2420

BIOLOGY 3040 4 credits  
**Comparative Anatomy of the Vertebrates**
Comparative studies of organs and systems of Vertebrata; includes laboratory dissections of shark, necturus, and cat.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 2140 and BIOLOGY 2240 or BIOLOGY 2340 or consent of instructor

BIOLOGY 3120 2 credits  
**Animal Tissue Culture**
Components: Laboratory, Lecture
Prereqs/Coreqs: P: one college level biology and chemistry course or consent of instructor

BIOLOGY 3140 4 credits  
**Vertebrate Embryology**
Lecture and laboratory study of amphibian, avian, and mammalian embryology.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and BIOLOGY 1750 or consent of instructor

BIOLOGY 3230 3 credits  
**Mammalogy**
A review of the mammalian fauna focusing on the major orders and families. Key morphological features, life history, and zoogeographic patterns will be reviewed for major groups. Discussion of current conservation and management issues. Lab includes identification of native Wisconsin mammals and an introduction to standard field and lab techniques for the study of mammals. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1750 and BIOLOGY 2420

BIOLOGY 3240 4 credits  
**Microbiology**
Classification, morphology, physiology, and genetics of microbes; relation of bacteria to viruses; survey of bacteria found in the environment and their control; principles of immunity and diseases.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 or BIOLOGY 1750 and CHEMSTRY 1140 or consent of instructor

BIOLOGY 3330 3 credits  
**Genetics**
This course explores what genes are, how they are expressed, and how they are passed on from generation to generation. In addition, applications of genetics in relation to mutation, disease, gene therapy, criminalistics and genetic engineering are also explored.
Components: Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 or consent of instructor

BIOLOGY 3340 4 credits  
**Entomology**
Structure, classification, life histories, behavior, and economic aspects of insects. An insect collection is required. See instructor for insect collection by May 1.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and BIOLOGY 1750 or consent of instructor

BIOLOGY 3450 3 credits  
**Ecology and Evolution**
Ecology and evolution will be considered from the perspectives of individual organisms, populations, communities, and ecosystems in an effort to illustrate the relationships between these concepts and the importance of how they both shape our world. Students will be introduced to the history, major principles, theories, dynamics, and approaches of ecology and evolution. (Fall, Spring)
Components: Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and BIOLOGY 1750 or consent of instructor

BIOLOGY 3460 3 credits  
**Ecological Methods and Research**
This class supplements BIOLOGY 3450 Ecology and Evolution and further explores the major principles, techniques, and approaches in ecology. This course will explore ecology in the field and laboratory with the goal of enabling students to plan, execute, and scrutinize ecological research and appreciate how science and research fit into ecology. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and BIOLOGY 1750 and BIOLOGY 2420; C: BIOLOGY 3450 or consent of instructor

BIOLOGY 3530 3 credits  
**Biotechnology**
Genetic elements that control gene expression. Procedures for creating and isolating cloned genes. Genetic engineering and uses of recombinant DNA.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: one college level biology and chemistry course or consent of instructor

BIOLOGY 3550 4 credits  
**Morphology and Evolution of Vascular Plants**
This broad course covers the structure or form (morphology) of the adult plant, its tissues, development and reproductive details, as well as the ecology, evolutionary history, and taxonomy of the group in which it is classified. Focus will be given to all phyla of extant vascular plants and major groups of extinct vascular plants, presenting the organisms from an evolutionary perspective. (Spring, odd years)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1350 or (BIOLOGY 1650 and BIOLOGY 1750)
BIOLOGY 3620 2 credits
Immunology
The basic concepts of immunology. The normal and abnormal immune response.
Components: Lecture
Prereqs/Coreqs: P: one college level biology and chemistry course

BIOLOGY 3640 4 credits
Plant Systematics
Principles and practice plant systematics, including history, nomenclature, specimen collection and archival techniques, modern systematic methods, and survey of major plant families. Field collection required.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and 1750 or consent of instructor

BIOLOGY 3650 4 credits
Plant Communities of Wisconsin
This course provides an introduction to the major plant communities of Wisconsin and neighboring states. It emphasizes the identification, biogeographic distribution, interrelationships, conservation and management of the major regional plant communities as well as their key plant species. Two extended weekend field trips are required. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and 1750 (or BIOLOGY 1350) and (BIOLOGY 3450 or BIOLOGY 3460) or consent of instructor

BIOLOGY 3660 3 credits
Animal Communities of Wisconsin
A survey of animals specific to, and characteristic of, Wisconsin's major ecological communities. Key ecological relationships that link animals to each other, as well as to the plants that define their habitat will be reviewed. Emphasis on organism identification. Two extended weekend field trips are required. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1750

BIOLOGY 3750 3 credits
Freshwater Biology
Examination of the physical components and biological communities of lakes, streams, and wetlands and the relationships between them. Integration of fieldwork, scientific literature, and laboratory analyses.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1750 and BIOLOGY 2420 and (CHEMISTRY 1050 or CHEMISTRY 1140) or consent of instructor, BIOLOGY 3450 recommended

BIOLOGY 4010 1 credit
Workshop in Biology
Varying topics. Does not count toward major or minor in Biology or minor in Biotechnology.
Components: Lecture

BIOLOGY 4040 5 credits
Molecular Biology
Detailed structural analysis of the biological molecules DNA, RNA, and proteins in relation to cellular processes. Exploration of experimental approaches that explain the molecular basis for all life activities.
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 2420 and BIOLOGY 2040 and BIOLOGY 3330 and one semester of chemistry or consent of instructor

BIOLOGY 4130 3 credits
Mammalian Endocrinology
The structural and functional classification of hormones, principles of hormone action, and the regulation of body functions by the endocrine system with emphasis on homeostasis.
Components: Lecture
Cross Offerings: AGSCI 4130
Prereqs/Coreqs: P: BIOLOGY 1650 or AGSCI 4110 and CHEMISTRY 1240 or consent of instructor

BIOLOGY 4150 4 credits
Forensic Botany
A survey of the structures of plants, fungi, and algae that can be used as botanical evidence in criminal investigation. Discussion of current literature, legal issues and future trends. Laboratory includes microtechnique, sample collection and preservation techniques, and testing methods. (Fall, even years)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1350 or (BIOLOGY 1650 and BIOLOGY 1750); recommended: BIOLOGY 2450, BIOLOGY 3550 or BIOLOGY 3640

BIOLOGY 4240 4 credits
Advanced Physiology
In depth study of physiologic processes from molecular to organismic level. Approached from a topical format, emphasizing recent advancements.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 2140 and BIOLOGY 2240 or BIOLOGY 2340 and BIOLOGY 2420 and CHEMISTRY 1240

BIOLOGY 4340 4 credits
Mammalian Histology
The organization of cells and their products to form tissues and organs; morphological and functional comparisons of tissue organization of representatives from the class Mammalia.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and BIOLOGY 1750 or consent of instructor

BIOLOGY 4410 1 - 3 credits
Topics in Biology
Presentations of biological topics.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1650 and BIOLOGY 1750 or consent of instructor
BIOLOGY 4440 4 credits
**Human Gross Anatomy**

There is nothing more fascinating than learning about the human body. Its structure, organization and physiology are of interest from a personal health and clinical standpoint. This course will provide the opportunity for advanced students to engage in an intense study of human gross anatomy. This course will have a significant lab component where students will apply concepts of anatomy and physiology to the prosected human cadaver.

Components: Laboratory
Prereqs/Coreqs: P: (BIOLOGY 2140 and BIOLOGY 2240) or BIOLOGY 2340 or consent of instructor

---

BIOLOGY 4520 2 credits
**Biotechnology Seminar**

Selected topics from among recent advances in biotechnology.

Components: Seminar
Prereqs/Coreqs: P: BIOLOGY 3530 or consent of instructor

---

BIOLOGY 4530 3 credits
**Plant Pathology**

This course covers the major aspects of plant disease including abiotic and biotic causes, disease and symptom recognition, how disease occurs, and methods and techniques for prevention and control. (Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 1350 (or BIOLOGY 1650 & BIOLOGY 1750) AND at least one additional 2000+ level biology or plant-related course or consent of instructor; C: junior standing

---

BIOLOGY 4660 1 - 8 credits
**Biology Internship Experience**

Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry, or institution. The nature of the assignment, type of experience, number of credits, and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and department. Does not count toward a major or a minor in biology.

Components: Field Studies

---

BIOLOGY 4710 1 - 3 credits
**Selected Regional Habitats**

Offers a first-hand introduction to the flora and fauna of selected unusual habitats in the form of an interim field trip. Up to three credits can be counted toward a biology major.

Components: Field Studies
Prereqs/Coreqs: P: BIOLOGY 1650 and BIOLOGY 1750 or consent of instructor

---

BIOLOGY 4920 1 - 3 credits
**Independent Research in Biology**

Individual specialized study.

Components: Independent Study
Prereqs/Coreqs: P: approval of the biology department chairperson and faculty advisor before registration. Up to two credits can be counted toward a biology major. Junior or senior standing

---

BIOLOGY 4970 1 credit
**Senior Thesis**

This course provides students a unique, “capstone” opportunity to conduct research in collaboration with their peers and integrate knowledge from the different areas of biology. With assistance from a faculty coordinator, students from all areas of biology will work together to complete their individual independent research projects. Students will produce a manuscript-quality report and make a formal presentation on their research. (Fall, Spring)

Components: Lecture
Prereqs/Coreqs: P: BIOLOGY major with senior standing and BIOLOGY 4920

---

BIOLOGY 4990 1 credit
**Capstone Course: From Atoms to Ecosystems - The Study of Life**

This course is an exciting opportunity for students to integrate knowledge from the different areas of biology and associated disciplines to an interrelated whole, the study of life. In this endeavor, students will be applying their knowledge to current scientific and bioethical issues in biology. Students will also explore and reflect on what it means to be a biologist. (Fall, Spring)

Components: Lecture
Prereqs/Coreqs: P: Biology major with senior standing

---

Business Administration Courses

BUSADMIN 1300 3 credits
**Global Business**

This course will survey current issues and trends in global business. Specific emphasis will be placed on the impact of these trends on managers in the multinational organizational setting. Topics include a study of the economic, financial and legal environments of international business. In addition, trade issues and corporate strategies will be discussed.

Components: Lecture
GE: International Education

BUSADMIN 2330 3 credits
**Leadership and Management**

An introduction to the role of management through discussion of the planning, organizing, leading, and controlling functions. Behavioral, quantitative, and qualitative aspects of managerial decision making are explored.

Components: Lecture

BUSADMIN 2630 3 credits
**Introduction to Marketing**

The study of marketing encompasses the activities involved in anticipating, managing, and satisfying demand via the exchange process. Activities include environmental analysis, marketing research, consumer analysis, product planning, distribution planning, promotion planning, price planning, and marketing management. The dynamic nature of marketing, the complex environment surrounding today's marketers, and various marketing functions, performers, and strategies are examined.

Components: Lecture
BUSADMIN 2950 1 - 3 credits
Special Issues in Business
Includes discussion of current issues and trends that have an impact on the business sector. Specific topics will vary.
Components: Lecture

BUSADMIN 3030 3 credits
Human Resource Management
An introduction to topics such as human resource planning, equal employment opportunity, selection, training and development, performance appraisal, compensation, safety and health, and employee and labor relations. The impact of laws and of societal and business trends on human resource functions is presented. Each manager's role in dealing with human resources is emphasized.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 2330 or AGINDUS 1500

BUSADMIN 3100 3 credits
Compensation Management
An exploration of the discipline of compensation management. The processes of job analysis and job evaluation are discussed as methods to determine internal pay equity. Market wage surveys are presented as tools to ensure external equity. Wage scale development and various employee benefit options are discussed. Other topics include wage and benefit related laws, performance appraisal, and motivation theories.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3030

BUSADMIN 3110 3 credits
Integrated Marketing
An examination of the concepts, strategies, and applications involved in direct marketing including mail order and direct response advertising. Measurability, accountability, lists, data, and the integration of direct marketing programs into total marketing efforts and overall organization goals and functions are discussed.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 2630 or AGINDUS 2430

BUSADMIN 3120 3 credits
Retailing
A study of various types of retail institutions and their characteristics. The many kinds of retail ownership options, strategy mixes, locations, organizational formats, merchandise and inventory management techniques, and promotional policies are compared and evaluated. Cases reflecting a global perspective are included.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 2630 or AGINDUS 2430

BUSADMIN 3130 3 credits
The Legal Environment of Business
This is a study of the legal and ethical environment of business and its effects on business decisions. The course includes the substantive areas of contract law, tort, criminal law, government regulation, employment law, consumer protection, antitrust, environmental law and securities law. We will also examine the ethical implications of legal disputes in business.
Components: Lecture

BUSADMIN 3140 3 credits
Managerial Law
This course is a continuation of BUSADMIN 3130, Legal Environment of Business. Course coverage includes property, wills, trusts, and estates, agency, business organizations, secured transactions and bankruptcy, and commercial paper.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3130

BUSADMIN 3150 3 credits
Principles of Real Estate
Classification and acquisition of property rights, types of estates in property, relation of landlord and tenancy, conveyancing, liens and mortgages, real estate brokerage.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3130 or consent of instructor

BUSADMIN 3230 3 credits
Small Business Management
This course acquaints the student with many aspects of owning and operating a small business. Topics covered include the characteristics of small business managers, planning and organizing for a new or an ongoing business, staffing a business, producing and marketing a product or service, profit planning and control, security, and the specifics of developing a business plan.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 2630 or AGINDUS 2430

BUSADMIN 3330 3 credits
Labor Law
A study of legislative and judicial regulation of labor and management designed to familiarize the individual with the historical development of labor legislation, NLRB rulings, court decisions, and current problems.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3030

BUSADMIN 3340 3 credits
Management, Gender and Race
This course reviews the changing nature of management and explains why gender and race/ethnicity have become important concerns of business. It examines the status of women and people of color in managerial or administrative positions and discusses socialization processes, stereotypes, equal employment opportunity laws, diversity management, illegal harassment, and power in organizations. Networking, mentoring, work/life balance, and career planning also are addressed.
Components: Lecture
Cross Offerings: WOMSTD 3340, ETHNSTDY 3340
GE: Ethnic and Gender
Prereqs/Coreqs: P: BUSADMIN 2330 or AGINDUS 1500 or junior standing

BUSADMIN 3400 3 credits
Personal Financial Planning
A study of the major financial decisions encountered by individuals. The course explores a variety of consumer problems found in a modern, complex economy. Subjects covered include the financial planning process, money management, consumer borrowing, insurance planning, budgeting, investments, and retirement and estate planning.
Components: Lecture
Prereqs/Coreqs: junior standing to enroll in this course
BUSADMIN 3430 3 credits
Risk Management
This course covers the theory of risk and introduces the basic concepts of risk management. Special emphasis is placed on risk transfer to insurance companies. The course also introduces basic insurance concepts for both the individual and corporate consumers because risk management decisions presuppose a thorough understanding of the nature and functions of insurance.
Components: Lecture
Prereqs/Coreqs: junior standing to enroll in this course

BUSADMIN 3450 3 credits
Employment Law
An analysis of employment relations legislation and its impact on areas of human resource management. Primary emphasis on employment discrimination and affirmative action, unemployment compensation, and workers compensation, the Fair Labor Standards Act, OSHA, and ERISA.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3030

BUSADMIN 3500 3 credits
Employee Training and Development
Employee Training and Development is an upper-division course that examines the principles and practices of these two critical processes in a variety of organizational settings. The course presents a comprehensive overview of training and development topics. Throughout the course students acquire and then demonstrate a knowledge base in each of these areas. At the end of the course, students are prepared to conduct efficient and effective training and development programs within the Human Resources department of an organization.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3030

BUSADMIN 3530 3 credits
Organizational Behavior
Organizations, in and of themselves, do not behave; the people within them do. This course will give students a comprehensive view of organizational theory and behavior by studying individual and group behaviors and how these interrelate with the organization's structure, systems and goals.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 2330 or AGINDUS 1500

BUSADMIN 3540 3 credits
Quality Management
Provides an understanding of the tools, language, and techniques used in the field of Quality Management. The history of the quality movement, major tenets of the field, theorists and their philosophies, and the use of basic tools of Quality Management will be covered in this course. The course focus will be project-based in a team environment.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 2330 or AGINDUS 1500

BUSADMIN 3600 3 credits
Regulatory Compliance Management
An examination of the response of business to the actions of government agencies and regulatory legislation in the United States. Content includes the social, political, and economic rationale of government regulation with emphasis on administrative law, regulatory theories and applications, and management regulatory compliance techniques and strategies.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 2330

BUSADMIN 3620 3 credits
Financial Management
An introduction to the finance function and financial management of the firm, including techniques of financial analysis, working capital management, capital budgeting, the acquisition and management of corporate capital, and dividend policy. Analysis of how the financial manager influences the decision-making process within the firm.
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in ACCTING 2010 and completion of university math requirement

BUSADMIN 3630 3 credits
Advertising
Advertising as a selling and communications tool; its place in the modern economy; its procedures, methods, and development functions.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 2630 or AGINDUS 2430

BUSADMIN 3640 3 credits
Financial Systems Analysis
A macro-finance course that deals with the financial system of the United States. Major emphasis is placed on financial markets, financial institutions, financial assets, and their interaction within the financial system framework. The course also has a focus on the management and regulation of both markets and institutions. Web assignments are an integral part of this course.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3620

BUSADMIN 3700 3 credits
Marketing Research
Introduction to the research problem and the scientific method; research design and sources, evaluation of data, and presentation of research findings.
Components: Lecture
Prereqs/Coreqs: P: (BUSADMIN 2630 or AGINDUS 2430) and (ECONOMIC 2410 or MATH 1830)

BUSADMIN 3710 3 credits
Bank Management
The purpose of the course is to analyze the issues involved in managing commercial banks and related financial institutions. The theory and practice of bank management will be studied with particular emphasis on the topics of asset management, and capital adequacy. Additionally, new dimensions in banking structure will be introduced.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3620
BUSADMIN 3720 3 credits
**International Marketing**
A conceptual focus on the breadth of the international marketing management area including problems, strategies and techniques, plus a survey background in such environmental factors as legal, cultural, economic, financial, and regional characteristics. The purpose is to prepare students and practicing business managers for successful operations in the world marketing environment of developing, industrial, and/or technological nations.
Components: Lecture  
Prereqs/Coreqs: P: BUSADMIN 2630 or AGINDUS 2430

BUSADMIN 3740 3 credits
**Consumer Behavior**
Consumer behavior reaches for a better understanding of the consumer buying process. It begins with an examination of basic, standard steps that consumers take while making a purchasing decision and moves into consumer motives based on various consumer cohorts. The marketing student -- after having studied consumer behavior -- will have a stronger appreciation for the basis of consumer needs and will be better prepared to serve them.
Components: Lecture  
Prereqs/Coreqs: P: BUSADMIN 2630 or AGINDUS 2430

BUSADMIN 3750 1-3 credits
**International Short Study**
The International Term Short Study course abroad is designed to help students develop an understanding of the world's economies, the globalization of technology, capital, industries, systems, goods, services, and inputs that have enhanced much of the international issues in business practices and cultures. An overview of the International business environment, including business strategies, history, and cultures will be covered. Credit numbers possible are 1-3. Students who wish to use this course to fulfill International Education requirements, must request for 3 credits hours.
Components: Lecture  
GE: International Education

BUSADMIN 3820 3 credits
**Professional Selling**
A study of the principles, techniques, and practices involved in selling products, services, and ideas to final consumers and organizational buyers. The selling processes used by manufacturers, distributors, and direct marketers are considered. Changes in the selling environment due to global marketing and international sales are discussed. Several sales presentations are required.
Components: Lecture  
Prereqs/Coreqs: P: SPEECH 1010 or SPEECH 1250

BUSADMIN 3830 3 credits
**Sales Management**
A study of the role of sales management in the total marketing structure examines the role of sales manager and how this role serves the sales department and the company. Recruiting, selection, training, motivation leadership, compensation plans, and sales forecasting are studied with focus on the administration of these functions. Evaluation and performance appraisal of the sales force are also included. The course considers the many aspects of international selling and training salespersons for global territories.
Components: Lecture  
Prereqs/Coreqs: P: (BUSADMIN 2630 or AGINDUS 2430) and BUSADMIN 3820

BUSADMIN 3850 1-3 credits
**Investments**
A contemporary study of investments with a focus on past and present investment decision making, sources of information, stock investing, modern portfolio theory, and mutual fund creation and selection.
Components: Lecture  
Prereqs/Coreqs: P: BUSADMIN 3620

BUSADMIN 4030 3 credits
**Financial Decision Making**
An analysis of actual problems encountered by financial managers from major firms. This course utilizes the case study methodology and requires heavy usage of computer application skills, particularly spreadsheet skills. The goal is to identify the problem, analyze it, and finally make a well-justified recommendation to the firm.
Components: Lecture  
Prereqs/Coreqs: P: BUSADMIN 3620

BUSADMIN 4100 3 credits
**Supply Chain Management**
This course focuses on the principles and concepts of Supply Chain Management, as well as a review of the role of Supply Chain Management functions within an organization. Analytical and evaluative skills are developed through critical examination of theories, models, tools and techniques employed. Topics covered include Strategic Sourcing, Forecasting and Collaborative Planning, Inventory Management, Customer Relationship Management, and Service Response Logistics.
Components: Lecture  
Prereqs/Coreqs: P: ECONOMIC 2410 or MATH 1830 or MATH 4030 or consent of instructor

BUSADMIN 4110 3 credits
**Management Science**
An introduction to quantitative methods used in business. Introduction to decision theory, linear programming and its applications, network and scheduling models. (Fall)
Components: Lecture  
Cross Offerings: ECONOMIC 4110  
Prereqs/Coreqs: P: completion of university math requirement and ECONOMIC 2410
BUSADMIN 4120 3 credits

Operations Management
This course focuses on quantitative decision tools which assist the manager in the planning, organizing, and controlling of operations in industrial and service organizations. Topics covered include forecasting, queuing theory, transportation models, facility layout, scheduling, inventory control, capacity planning and materials planning.
Components: Lecture
Prereqs/Coreqs: P: (BUSADMIN 2330 or AGINDUS 1500) and (ECONOMIC 2410 or MATH 1830)

BUSADMIN 4140 3 credits

International Management
This course focuses on the management of an enterprise engaged in international business. Topics include: why international business occurs, the nature and influence of the host country environment on firms conducting international business, how international strategic alternatives for these firms are identified and evaluated, the influence of culture on managers and managerial practices, and the ethical concerns and social responsibility associated with managing international business activities.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 1300 and BUSADMIN 2330

BUSADMIN 4200 3 credits

Employee Recruitment and Selection
This course provides students with an understanding of these two critical processes in a variety of organizational settings. Throughout the course, students acquire and then demonstrate a knowledge base in each of these areas by completing a variety of projects. At the end of the course, students are prepared to conduct efficient and effective recruiting and selection programs within the Human Resource department of the organization.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3030

BUSADMIN 4330 3 credits

Labor-Management Relations
Gives an overview of the process of labor relations, in which management deals with employees who are represented by a union. The history of major labor unions and primary labor laws and court cases are covered, along with the general structure and operational aspects of today's labor organizations. Union certification, collective bargaining, and dispute resolution are discussed in detail. Students also participate in a mock labor contract negotiation project and analyze sample grievances.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 3030 or ECONOMIC 3430

BUSADMIN 4630 3 credits

Marketing Management
The determination of market policy; marketing administration and application of principles pertaining to management of marketing resources.
Components: Lecture
Prereqs/Coreqs: P: BUSADMIN 2630 or AGINDUS 2430 and one other marketing course

BUSADMIN 4840 3 credits

Business Policy/Strategy
An introduction to strategic decision-making; integration of the functional organizational areas through analysis of case studies and related readings; development of external information scanning using resources such as Internet and business publications.
Components: Lecture
Prereqs/Coreqs: P: senior standing and ACCTING 3000 (or higher) and BUSADMIN 1300 and BUSADMIN 2630 and BUSADMIN 3030 and BUSADMIN 3620 and ECONOMIC 2130 and ECONOMIC 2230

BUSADMIN 4940 1 - 4 credits

Special Problems
Supervised readings in specialized areas.
Components: Independent Study
Prereqs/Coreqs: P: junior standing; appropriate forms must be filled out by students with approval of the instructor and the department chairperson

BUSADMIN 4950 1 - 4 credits

Special Topics
Specific contemporary or other business-related issues will be explored in depth. Topics vary.
Components: Lecture

BUSADMIN 4990 1 - 8 credits

Internship
Extends the learning process by giving students a chance to apply their knowledge and skills on the job in an actual organization. A 3-credit internship is required for the Business Administration major. May be repeated for up to eight credits. Graded on pass/fail basis.
Components: Field Studies
Prereqs/Coreqs: P: major or minor in Business and junior standing

Chemistry Courses

CHEMISTRY 1020 2 credits

Introductory Chemistry
A one semester course for students who do not have a sufficiently strong chemistry background to succeed in Chemistry 1450. Topics will include measurements, atomic and molecular structure, periodicity, stoichiometry, states of matter, intermolecular forces, and solutions. (Fall, Spring)
Components: Discussion, Lecture

CHEMISTRY 1050 5 credits

General Chemistry
A one-semester survey of chemistry including organic and inorganic compounds. A course to partially satisfy the laboratory science requirement, and for students who need only one semester of chemistry for their major. (Fall, Spring)
Components: Discussion, Laboratory, Lecture
GE: Natural Science
CHEMISTRY 1140 4 credits

General Chemistry
First semester of a two-semester sequence. Basic theory and concepts; atomic structure, periodic laws, stoichiometry, gas laws, thermochemistry, solutions, the chemical bond, oxidation-reduction. (Fall, Spring)
Components: Exam, Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: a “C” or better MATH 1530 or MATH 1630 or MATH 1730 or MATH 1830 or math proficiency level of 20 or higher

CHEMISTRY 1240 4 credits

General Chemistry
Second semester of a two-semester sequence. Kinetics, chemical equilibrium, electrochemistry, thermodynamics, organic, descriptive and nuclear chemistry. (Fall, Spring)
Components: Exam, Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: a “C” or better in CHEMISTRY 1140

CHEMISTRY 1450 5 credits
Chemistry for Engineers
A one semester course for engineering students with a strong background in high school chemistry and mathematics. Topics include measurements, atomic theory, stoichiometry, molecular structure, thermochemistry, states of matter, intermolecular forces, solutions, kinetics, equilibrium, thermodynamics, electrochemistry, solid state, material science and organic chemistry. (Fall, Spring)
Components: Exam, Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: an “A” or “B” in high school chemistry or a “C” or better in CHEMISTRY 1020 and previous completion or concurrent enrollment in MATH 2530 or higher

CHEMISTRY 2000 1 - 3 credits
Undergraduate Research
Training in research methods, use of scientific literature and evaluation of data. A student may register for one to three credits in a given semester. (Fall, Spring, Summer)
Components: Independent Study
Prereqs/Coreqs: P: a “C” or better in one semester of general chemistry

CHEMISTRY 2150 4 credits
Quantitative Analysis
Theories and principles of gravimetric and volumetric analysis, equilibrium and stoichiometry of solubility, neutralization, oxidation-reduction, complexometry; introduction to absorption spectrophotometry, flame photometry, ion exchange, and statistical treatment of data. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMISTRY 1240

CHEMISTRY 2730 4 credits
Inorganic Chemistry
An introductory course with an emphasis on coordination chemistry, solid state chemistry, descriptive chemistry of the common representative and transition elements, metallurgy. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMISTRY 1240

CHEMISTRY 3110 1 credit
Environmental Chemistry Lab
Laboratory complementary to CHEM 3130 in which students gain experience in the laboratory techniques and methods associated with structure, composition, and chemical reactions of the three spheres of the environment. (Fall)
Components: Laboratory
Prereqs/Coreqs: P: CHEMSTRY 3130 or concurrent enrollment

CHEMISTRY 3130 3 credits
Environmental Chemistry
A study of structure, composition, and chemical reactions of the three major spheres of the environment: atmosphere, hydrosphere, and lithosphere. Additional inquiries into the human impact on the environment and environmental toxicology are also addressed. (Fall)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMISTRY 1240 or CHEMISTRY 1450

CHEMISTRY 3270 2 credits
Forensic Chemistry
An in-depth examination of forensic applications of chemical analysis: presumptive and confirmatory drug identification, microscopic techniques in trace evidence analysis, quality assurance and quality control (QA-QC) issues for the crime lab analyst, the toxicology of illicit compounds, and modern methods of DNA analysis related to criminalistics. (Winterim)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMISTRY 2150 and CHEMISTRY 3540

CHEMISTRY 3510 1 credit
Organic Chemistry Laboratory
Laboratory complementary to CHEMSTRY 3540 which involves an introduction to basic organic laboratory techniques including gas chromatography and infrared spectroscopy. (Fall)
Components: Laboratory
Prereqs/Coreqs: P: CHEMSTRY 3540 or concurrent enrollment

CHEMISTRY 3540 4 credits
Organic Chemistry Lecture
An introduction to organic chemistry including a study of aliphatic and aromatic compounds and the functional groups, fundamentals of organic structural theory, chemical bonding, nomenclature, stereochemistry, infrared spectroscopy, structure/property relationships and analysis, as well as proteins, carbohydrates, and other natural compounds. (Fall)
Components: Exam, Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMISTRY 1240

CHEMISTRY 3610 1 credit
Organic Chemistry Laboratory
Continuation of CHEMISTRY 3510. Complementary to CHEMISTRY 3630 involving preparations of greater difficulty and an introduction to organic qualitative analysis. (Spring)
Components: Laboratory
Prereqs/Coreqs: P: CHEMISTRY 3510 and C: CHEMISTRY 3630
CHEMISTRY 3630 3 credits

**Organic Chemistry Lecture**
A second semester of organic chemistry providing an in-depth study of the preparation, reactions, and analysis of the functional groups with an emphasis on mechanisms, structure/property relationships, multistep synthesis, nuclear and mass spectrometry, and pericyclic reactions. (Spring)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMSTRY 3540

CHEMISTRY 3810 1 credit

**Chemical Synthesis and Characterization**
For students desiring additional laboratory experience. In cooperation with the instructor, students will select experiments which require insights into the application and execution of more sophisticated techniques. (Spring)
Components: Laboratory
Prereqs/Coreqs: P or C: CHEMSTRY 3610

CHEMISTRY 3900 1 - 3 credits

**Directed Studies**
Supervised individual study of a topic selected by the student and approved by the staff. A student may register for one to three credits in a given semester and may accumulate a total of four credits. (Fall, Spring, Summer)
Components: Independent Study
Prereqs/Coreqs: P: 12 credits of chemistry

CHEMISTRY 4000 1 - 3 credits

**Undergraduate Research**
Training in research methods, use of scientific literature and evaluation of data; results presented in a written report. A student may register for one to three credits in a given semester and may accumulate a total of four credits. (Fall, Spring, Summer)
Components: Independent Study
Prereqs/Coreqs: P: 18 credits in chemistry and department consent

CHEMISTRY 4060 1 credit

**Chemistry Seminar**
The student will make presentations of findings in undergraduate research or in current topics of Chemistry. (Spring)
Components: Seminar

CHEMISTRY 4110 1 credit

**Physical Chemistry Lab I**
Experimental studies applying theoretical principles to practical problems and processes involving chemical and physical phenomena. Fundamentals of chemical measurement using chemical and physical sensors. (Fall)
Components: Laboratory
Prereqs/Coreqs: P: a “C” or better in CHEMISTRY 2150; C: “C” or better in CHEMISTRY 4130

CHEMISTRY 4130 3 credits

**Physical Chemistry**
Atomic structure, thermodynamics and quantum mechanics, molecular structure, spectroscopy, intermolecular interactions, macromolecules, structure of liquids and solids. (Fall)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in all courses - (PHYSICS 2640 and PHYSICS 2610 or PHYSICS 1240 and PHYSICS 1210 or PHYSICS 2340) and MATH 2640

CHEMISTRY 4130 3 credits

**Physical Chemistry Lab II**
Advanced experimental studies applying theoretical principles to chemical and physical phenomena. (Spring)
Components: Laboratory
Prereqs/Coreqs: P: a “C” or better in CHEMISTRY 4110; P or C: CHEMISTRY 4230.

CHEMISTRY 4230 3 credits

**Physical Chemistry**
Statistical and quantum mechanics, transport processes, thermodynamics, spectroscopy, solutions, phase transitions, and kinetics. (Spring)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in all courses - CHEMISTRY 4130 and (PHYSICS 2340 or PHYSICS 2640 and PHYSICS 2610) and MATH 2840

CHEMISTRY 4240 4 credits

**Instrumental Analysis**
Theory and laboratory experience in instrumental methods of analysis; common electrochemical and spectrochemical methods, chromatographic methods, electronics and other selected topics. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in both CHEMISTRY 2150 and CHEMISTRY 4130

CHEMISTRY 4520 2 credits

**Nanoscale Characterization and Fabrication**
Students will learn and apply several techniques for the fabrication of nanoscale structures. Additionally, students will learn instrumental and analytical techniques to characterize and measure these submicrometer structures. Because nanotechnology is an interdisciplinary field, students will learn and apply techniques from biology, chemistry, and materials science. This course is required for the Minor in Microsystems and Nanotechnology. (Fall)
Components: Laboratory
Prereqs/Coreqs: P: ENGRPHYS 3930

CHEMISTRY 4610 1 credit

**General Biochemistry Lab**
Chemistry of biological compounds and biochemical techniques. (Spring)
Components: Laboratory
Prereqs/Coreqs: C: CHEMISTRY 4630 or concurrent enrollment

CHEMISTRY 4630 3 credits

**General Biochemistry**
Introduction to the chemistry of proteins, carbohydrates, lipids, and nucleic acids in biological systems including the basics of metabolism and enzyme kinetics. (Spring)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMISTRY 3540
CHEMSTRY 4660 1 - 8 credits

Cooperative Field Experience
Enhancement of the educational experience through placement of a student with a cooperative agency, business, industry or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and the department. (Fall, Spring, Summer)

Components: Field Studies

CHEMSTRY 4680 8 credits

Criminalistics Emphasis Internship
This 8-credit course involves working 360 hours with an accredited crime laboratory. The course is designed for the student to integrate the fundamental theory from the first three years of the Criminalistics Emphasis curriculum with the opportunity to work as an intern in a fully functioning crime laboratory as a bench scientist. Students will likely conduct research and development work during their time in the laboratory and are required to complete weekly reports, assignments, and presentations related to the experience.

Components: Field Studies
Prereqs/Coreqs: P: a “C” or better in CHEMSTRY 2150 and CHEMSTRY 3630

CHEMSTRY 4730 2 credits

Advanced Topics in Inorganic Chemistry
A survey of the theories of atomic and molecular structure and chemical bonding; advanced descriptive studies of the common elements. (Spring)

Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMSTRY 2730 and CHEMSTRY 4130

CHEMSTRY 4810 2 credits

Advanced Topics in Organic Chemistry
Selected topics from among recent advances in mechanisms, structure-reactivity correlations, stereochemistry and conformational analysis, resonance and molecular orbital theory, spectra, natural products, heterocyclic systems and synthesis. (Spring)

Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMSTRY 3630 and CHEMSTRY 3610 and C: CHEMSTRY 4230

CHEMSTRY 4820 2 credits

Advanced Topics in Physical Chemistry
Topics selected from thermodynamics, chemical kinetics, atomic and molecular structure, statistical mechanics, nuclear and radiation chemistry. (Spring)

Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMSTRY 4230

CHEMSTRY 4830 3 credits

Biochemistry Topics
An in-depth study of metabolism and regulation and enzyme mechanisms as well as cell communication, transport mechanisms, and immunology, gene expression, and regulation. (Fall)

Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CHEMSTRY 4630

CHEMSTRY 4910 1 credit

Advanced Biochemistry Laboratory
Advanced experimental studies applying theoretical principles discussed in CHEMSTRY 4830 including protein binding, protein characterization, gene expression and gene regulation.

Components: Laboratory

Civil Engineering Courses

CIVILENG 2120 3 credits

Civil Engineering Computer Applications
Engineering problem solving using spreadsheets, MathCAD, and AutoCAD Civil 3D. Spreadsheet and MathCAD applications include graphing, curve fitting, interpolation, modeling, solving linear and non-linear equations, matrix methods, simultaneous equations, etc. Civil 3D applications include creation of topographic maps and determination of earthwork volumes. (Fall, Spring)

Components: Lecture
Prereqs/Coreqs: P: MATH 2640. C: CIVILENG 2630

CIVILENG 2630 3 credits

Elements of Surveying
General use and care of surveying instruments; elevation determination, horizontal positioning; coordinate systems, topographic and construction surveys, introduction to boundary surveys, horizontal and vertical curves. (Fall, Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: GENENG 1320 or INDUSTDY 1230; C: MATH 2530 or 2450

CIVILENG 2950 2 credits

Civil and Environmental Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science. Credits do not fulfill any graduation requirement. (Fall, Spring, Summer)

Components: Field Studies
Prereqs/Coreqs: P: sophomore standing and a cumulative GPA of 2.50

CIVILENG 2960 2 credits

Civil and Environmental Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science. Credits do not fulfill any graduation requirement. (Fall, Spring, Summer)

Components: Field Studies
Prereqs/Coreqs: P: sophomore standing and a cumulative GPA of 2.50
CIVILENG 2970 1 credit
Civil and Environmental Engineering Internship
Work experience in industry under the direction of the Cooperative Education Office of the College of Engineering, Mathematics, and Science. Note: This program is separate and distinct from the Cooperative Education Program and is principally designed to cover the summer vacation period. Credits do not fulfill any graduation requirement. (Summer)
   Components: Field Studies

CIVILENG 3020 3 credits
Construction Engineering
Contracts, specifications, legal aspects and associated liabilities of construction documents, site management and planning, introduction to project scheduling and cost estimating, CPM, earthwork calculations and cross sections. (Fall, Spring)
   Components: Laboratory, Lecture
   Prereqs/Coreqs: P: (CIVILENG 2120 or COMPUTER 1830) and CIVILENG 2630

CIVILENG 3030 3 credits
Construction Materials
Fundamentals of engineering materials; analysis of aggregate and blending techniques; influences of aggregate mineralogy; analytical instrumentation and testing; introduction to portland cement chemistry; theory and design of portland cement concrete mixtures; bituminous materials and mixes; influences of mix properties on pavement durability. Construction material design projects. (Fall, Spring)
   Components: Laboratory, Lecture
   Prereqs/Coreqs: C: CIVILENG 2120 and GENENG 2340

CIVILENG 3100 4 credits
Structural Mechanics
Design loads; stability and determinacy of trusses, beams and frames; member forces and deflection of statically determinate trusses; shear and moment diagrams, slopes and deflections of statically determine beams and frames; influence lines and moving loads; force methods of indeterminate trusses, beams and frames; displacement methods of indeterminate beams and frames; approximate methods of indeterminate structures; computers in structural analysis. (Fall, Spring)
   Components: Laboratory, Lecture
   Prereqs/Coreqs: P: GENENG 2340 and a “C” or better CIVILENG 2120

CIVILENG 3150 3 credits
Reinforced Concrete Design
Design of reinforced concrete flexural members with consideration of shear, torsion deflection, and excessive cracking. Design of short compression members. Computer analysis of statically indeterminate structures; introduction to pre-stressed concrete and composite construction. (Fall, Spring)
   Components: Discussion, Laboratory, Lecture
   Prereqs/Coreqs: P: a “C” or better in CIVILENG 3100 and CIVILENG 3030

CIVILENG 3300 4 credits
Fluid Mechanics
Fluid properties; statics; ideal and real fluid flow, energy, continuity and momentum equations, laminar and turbulent flow in closed conduits, free surface flow. (Fall, Spring)
   Components: Laboratory, Lecture
   Prereqs/Coreqs: P: a “C” or better in CIVILENG 2120 and GENENG 2130 C: MATH 2840

CIVILENG 3340 4 credits
Environmental Engineering
Water, air and soil chemistry; toxicity and risk; watershed analysis; mass balance analysis; groundwater hydrology; water and wastewater treatment; surface water quality; solid and hazardous waste management; air pollution control. (Fall, Spring)
   Components: Laboratory, Lecture
   Prereqs/Coreqs: P: CHEMISTRY 1450 and a “C” or better in CIVILENG 2120 and COMPUTER 1830

CIVILENG 3530 3 credits
Transportation Engineering
Introductory overview of transportation systems with emphasis on the highway mode of transportation. Topics include fundamentals of transportation economics, land-use and transportation interaction, elements of transportation planning, traffic operations, concepts of highway locations and geometric design, and introduction to flexible and rigid pavement systems. (Fall, Spring)
   Components: Laboratory, Lecture
   Prereqs/Coreqs: P: a “C” or better in CIVILENG 2120 and CIVILENG 2630

CIVILENG 3730 3 credits
Geotechnical Engineering I
Exploration and classification of soils; index properties; effective stress; shear strength; water in soils; earth pressure; introduction to foundation design. (Fall, Spring)
   Components: Laboratory, Lecture
   Prereqs/Coreqs: P: GENENG 2340 and CIVILENG 2120

CIVILENG 3950 2 credits
Civil and Environmental Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science. Credits do not fulfill any graduation requirement. (Fall, Spring, Summer)
   Components: Field Studies
   Prereqs/Coreqs: P: junior standing

CIVILENG 3960 2 credits
Civil and Environmental Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science. Credits do not fulfill any graduation requirement. (Fall, Spring, Summer)
   Components: Field Studies
   Prereqs/Coreqs: P: junior standing
Civil and Environmental Engineering Internship
Work experience in industry under the direction of the Cooperative Education Office of the College of Engineering, Mathematics, and Science. Note: This program is separate and distinct from the Cooperative Education Program and is principally designed to cover the summer vacation period. Credits do not fulfill any graduation requirement. (Fall, Spring, Summer)
Components: Field Studies

CIVILENG 4020 3 credits
Construction Estimates and Costs
Methods of estimating, extending and pricing; use of blueprints, specifications and commercial cost sheets to bid a complete project; scheduling and pricing of labor. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3020 or INDUSTDY 2540

CIVILENG 4030 2 credits
Construction Equipment
Excavation methods and equipment; equipment costs; engineering fundamentals; analysis and design of equipment systems; drilling and blasting; material production and safety as they pertain to both heavy construction and surface mining methods. (Fall)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3020 or INDUSTDY 2540

CIVILENG 4040 3 credits
Construction and Professional Management
Construction management decision making; engineering economic comparisons, scheduling, bidding techniques, introduction to labor agreements, safety and QA/QC. (Spring)
Components: Lecture
Prereqs/Coreqs: P: CIVILENG 3020 or INDUSTDY 2540; C: MATH 4030

CIVILENG 4100 3 credits
Computer Analysis of Structures
Finite element theory and application with beam, truss, and plate elements. Introduction to engineering programming with Visual Basic and MATLAB; optimization, reliability, numerical integration, and eigen analysis for structural problems. (Fall)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3100

CIVILENG 4160 3 credits
Foundation Design
Bearing capacities and lateral earth pressures; design and computer application of shallow foundations, piles and caissons, retaining structures. (Fall)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3730; C: CIVILENG 3150

CIVILENG 4230 3 credits
Steel Design
Behavior and properties of structural steel, proportioning of members and connections; AISC-LRFD specifications. Integrated design project. (Spring)
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3100

CIVILENG 4250 3 credits
Wood Structures
Anisotropic properties of wood; wood connectors; solid wood members; beams, columns and beam columns; plywood; glulam beams and arches; integrated design project. (Spring)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3100

CIVILENG 4300 3 credits
Hydrology
Hydrologic cycle and data collection; rainfall-runoff relationships, and models; statistical analysis of streamflow and precipitation measurements; runoff estimation using Rational, TRSS, and USGS Regression methods and computer models; hydrograph analysis; detention pond and outlet structure design; culvert design and analysis; water surface profile analysis. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better CIVILENG 3300 and (MATH 4030 or MATH 1830) and CIVILENG 3340

CIVILENG 4310 3 credits
Groundwater Hydrology
Components: Lecture
Prereqs/Coreqs: P: (CIVILENG 3300 or AGSCI 4350 or AGINDUS 3950) and GEOLOGY 3130 and CIVILENG 3340

CIVILENG 4330 3 credits
Solid and Hazardous Waste Engineering
Waste minimization; toxicology and risk; physico-chemical and biological process design; composting; solid waste landfill design; life cycle analysis; recycling; regulatory framework. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3340

CIVILENG 4400 3 credits
Municipal Hydraulics
Population estimates, municipal water and wastewater quantities and requirements; design and analysis of municipal water distribution systems, storage reservoirs, and pumping stations; design of stormwater and wastewater collection systems. Municipal open channel flow applications. (Fall)
Components: Lecture
Prereqs/Coreqs: P: CIVILENG 3300 and CIVILENG 3340

CIVILENG 4410 3 credits
Wastewater and Drinking Water Treatment
Determination of sewage flowrates; water and wastewater characteristics; design of facilities for wastewater and drinking water treatment; residuals processing and management; advanced wastewater treatment and effluent disposal. (Spring)
Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3340
CIVILENG 4440 3 credits

Stormwater, Wetlands, and Watershed Management
Function, quality and distribution of wetlands; wetland delineation, permitting, mitigation and construction. Urban stormwater quality and management; regulatory framework. Best management practices to treat and manage stormwater. Computer modeling of environmental systems and waste load allocation. (Fall)

Components: Lecture
Prereqs/Coreqs: P: CIVILENG 3340 and CIVILENG 4300

CIVILENG 4500 3 credits

Highway Engineering
Comprehensive design of contemporary highway projects. Emphasis on improving utilization of existing facilities and creating efficient new facilities through transportation system management techniques. Consideration of geometric and intersection design and standards; earthwork computations; design of parking facilities; design of highway surface and subsurface drainage systems; environmental, mobility and community impacts as measures of effectiveness. (Fall)

Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3530

CIVILENG 4520 3 credits

Pavement Design and Analysis
Design methodologies for highway pavement structures; theoretical and applied aspects of flexible and rigid pavement design; soil conditions, base, subbase and pavement materials; frost action; economic considerations. (Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3030, CIVILENG 3530, and CIVILENG 3730

CIVILENG 4550 3 credits

Traffic Engineering
Elements of traffic engineering including road user, vehicle and roadway system; traffic flow theory; traffic studies and data collection; traffic control devices; principles of intersection signalization; capacity and level of service analysis for freeways, rural highways and intersections using state-of-the-art software for traffic operations and management. (Fall)

Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3530; C: MATH 4030

CIVILENG 4560 2 credits

Pavement Maintenance and Rehab
Evaluation of pavement distresses and the maintenance techniques used for their repair. Survey and evaluation methods, maintenance equipment and procedures, rehabilitation techniques, and identification of the most cost-effective option. Maintenance management software will be used to evaluate options. Guest speakers will be used for selected topics. (Spring)

Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3530 and CIVILENG 3030

CIVILENG 4630 3 credits

Geographic Information Systems
Basic GIS concepts in cartography and digital mapping, geodetic datums and control, map projections and coordinates, databases, topology, spatial queries/analysis, digital orthophotography, digital elevation models, and applications. Use of state-of-the-art software and World Wide Web components for GIS. (Fall)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 2120 and CIVILENG 2630

CIVILENG 4640 3 credits

Land Development and Planning
Comparison of common land development practices to low impact conservation subdivisions. Analysis of impacts of land development in terms of economic development, comprehensive planning (e.g. Smart Growth), environmental impacts, and sustainability. Design of a subdivision, oral presentations, analysis of zoning and other ordinances. (Spring)

Components: Lecture

CIVILENG 4730 3 credits

Geotechnical Engineering II
Review elements of soil mechanics; water in soil; slope stability; lateral earth pressures; sheet pile walls; geotextile applications; computer applications. (Spring)

Components: Lecture
Prereqs/Coreqs: P: a “C” or better in CIVILENG 3730

CIVILENG 4930 3 credits

Civil and Environmental Engineering Design Project
Open-ended comprehensive design in student's area of specialization. Discussion and experience in project management, work as a team, written reports and presentations, computer aided design and ethics. (Fall, Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: CIVILENG 3020 and CIVILENG 3030 and CIVILENG 3100 and CIVILENG 3150 and CIVILENG 3300 and CIVILENG 3340 and CIVILENG 3530 and CIVILENG 3730

CIVILENG 4980 1 - 4 credits

Current Topics in Engineering
In-depth study of a current topic of interest to the engineering profession. The topic to be covered will be identified in the course title. (Fall, Spring)

Components: Lecture

CIVILENG 4990 1 - 3 credits

Independent Study
Advanced study in area of specialization selected by student and approved by faculty member. (Fall, Spring, Summer)

Components: Independent Study
## Communication Technologies Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit Hours</th>
<th>Course Title</th>
<th>Prerequisites/Co-requisites</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMNCTN 1010</td>
<td>1</td>
<td>Software: Quark Basic</td>
<td>An introduction to powerful page layout software, taught on the Macintosh platform. (Fall, Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: Communication Technologies major or consent of instructor</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1020</td>
<td>1</td>
<td>Software: Quark Intermediate</td>
<td>An in-depth exploration of page layout software, taught on the Macintosh platform. (Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: COMMNCTN 1010</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1030</td>
<td>1</td>
<td>Software: PhotoShop Basic</td>
<td>An introduction to powerful photo manipulation software, taught on the Macintosh platform. (Fall, Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: Communication Technologies major or consent of instructor</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1040</td>
<td>1</td>
<td>Software: PhotoShop Intermediate</td>
<td>An in-depth exploration of photo manipulation software, taught on the Macintosh platform. (Fall, Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: COMMNCTN 1030</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1050</td>
<td>1</td>
<td>Software: Illustration Basic</td>
<td>An introductory course to image creation and manipulation software, taught on the Macintosh platform. (Fall, Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: Communication Technologies major or consent of instructor</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1060</td>
<td>1</td>
<td>Software: Illustrator Intermediate</td>
<td>An in-depth exploration of image creation and manipulation software, taught on the Macintosh platform. (Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: COMMNCTN 1050</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1100</td>
<td>1</td>
<td>Software: Flash Basic</td>
<td>An introduction to software for Web pages, animation, and multimedia. (Fall, Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: Communication Technologies major or consent of instructor</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1130</td>
<td>1</td>
<td>Software: Dreamweaver Basic</td>
<td>An introduction to the use of this Web page development software. (Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: Communication Technologies major or consent of instructor</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1160</td>
<td>1</td>
<td>Software: InDesign Basic</td>
<td>This is an introduction to Adobe InDesign, page layout software, taught on the Macintosh. (Spring)</td>
<td>Components: Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: Communication Technologies major or consent of instructor</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1170</td>
<td>1</td>
<td>Software: InDesign Intermediate</td>
<td>This is an intermediate level course focused on Adobe InDesign, page layout software, taught on the Macintosh. (Spring)</td>
<td>Components: Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: COMMNCTN 1160</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1230</td>
<td>3</td>
<td>Survey of Imaging</td>
<td>A foundation course emphasizing the fundamental concepts of visual communication; Survey of Imaging lectures will relate to hands-on assignments undertaken in the laboratory. The principles covered include form, structure, color theory, visual aesthetics, semiotics, and organizational systems as applied to the relationship of text and image throughout visual media. (Fall, Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: Communication Technologies major or consent of instructor</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1250</td>
<td>3</td>
<td>Audio and Video Systems</td>
<td>A hands-on introduction to multi-camera studio operations, as well as theoretical aspects of video, audio, RF, and control systems. (Fall, Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: COMMNCTN 1230</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1630</td>
<td>3</td>
<td>Introduction to Mass Media</td>
<td>Survey of mass communication theory and the role of mass media in society. Analysis of media evolution, structure, economics, effects, and control. (Fall, Spring)</td>
<td>Components: Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GE: Social Sciences</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1730</td>
<td>3</td>
<td>Introduction to Communication Technologies</td>
<td>A survey of communication technologies, including operational theory as well as practical application -- a total introductory approach to the study of electronic communication. (Spring of Even Years)</td>
<td>Components: Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: COMMNCTN 1630</td>
<td></td>
</tr>
<tr>
<td>COMMNCTN 1930</td>
<td>3</td>
<td>Basic Photography</td>
<td>An introduction to basic photography and darkroom techniques encompassing film selection, exposure variables, camera accessories, and lighting. Photographic history and contemporary issues will also be incorporated. A working digital single lens reflex camera is required or may be rented from the department. (Fall, Spring)</td>
<td>Components: Laboratory, Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prereqs/Coreqs: P: Communication Technologies major or consent of instructor</td>
<td></td>
</tr>
</tbody>
</table>
Basic Newswriting and Reporting
This course emphasizes news gathering, interviewing, research, writing techniques, Associated Press style, and knowledge of current events. Students will write frequently, both for publication and in the laboratory setting. (Fall, Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: ENGLISH 1230

Broadcast Media Writing
In-depth study of the broadcast writing process. Techniques and script styles used in writing non-journalistic copy with an emphasis on persuasive messages for radio and television. (Fall)
Components: Lecture
Prereqs/Coreqs: P: COMMNCTN 1630 and ENGLISH 1230

Introduction to Video Field Production
This course will focus on the single-camera approach to video production. The class will provide discussion and hands-on activities including field shooting and linear editing techniques. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 1250

Principles of Interactivity
This course introduces and extends the concepts, aesthetics, and techniques critical to the exploration and authoring of interactive art and design works. Topics on the fundamentals of time-based interactive design will include: forms of narrative, structure and organizing methods, visual and motion variables, sequencing, composition, and the application of these principles to design problems. (Fall)
Components: Lecture
Prereqs/Coreqs: P: COMMNCTN 1040 and COMMNCTN 1130 and COMMNCTN 1230

Applied Communication
Supervised practical experience in graphics, campus publications, media services, or the radio and television facilities. Maximum of 8 credits of COMMNCTN 2110, COMMNCTN 3120, and COMMNCTN 4030 will be applied to the major. (Fall, Spring)
Components: Laboratory
Prereqs/Coreqs: P: consent of instructor

Public Relations Principles
Techniques and practices in the field of public relations; topics discussed cover the general field of public relations and specialized areas. (Fall)
Components: Lecture
Prereqs/Coreqs: P: ENGLISH 1230
COMMNCTN 3150 3 credits

**Communication Research**
This course will prepare students to evaluate, conduct, and present research in the area of communication technologies studies.

Components: Lecture
Prereqs/Coreqs: P: ENGLISH 1230 and COMMNCTN 1630

COMMNCTN 3240 3 credits

**Video Production**
This course covers advanced theory and practice in producing and directing video programming in a studio setting. (Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 1250

COMMNCTN 3290 3 credits

**Radio Station Procedures**
This course is a study of radio station operations and procedures, including organizational structure, programming, sales, engineering, management, the impact of technology and law. (Spring of Odd Years)

Components: Lecture
Prereqs/Coreqs: P: COMMNCTN 1630

COMMNCTN 3330 3 credits

**Digital Imaging**
This course explores the digital relationship of photography and printmaking. While working with the ‘digital darkroom’, students will learn about digital cameras, film scanning, image quality controls, photomontage, and high quality digital output. (Every two years)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 1040 and COMMNCTN 1060 and COMMNCTN 1230 and COMMNCTN 1930

COMMNCTN 3500 3 credits

**Photography II**
A thorough study of the technologies and techniques of photography, with emphasis on applications to real photographic problems. This course provides technical information and in-depth knowledge of equipment, as well as experience with a variety of essential photographic principles and procedures. A working digital single lens reflex camera is required or may be rented from the department. (Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 1030 and COMMNCTN 1930

COMMNCTN 3560 3 credits

**Broadcast News**
Theory and practice in broadcast news gathering and presentation. Writing, field acquisition of story elements, technical considerations, and analysis of the news process and ethics. (Every two years)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 2030 and COMMNCTN 2070

COMMNCTN 3580 3 credits

**Documentary**
Explore, examine and assess the development, forms and subject matter of the documentary, beginning with its roots in film and continuing into television, including an understanding of documentary's impact on society and social institutions. In particular with regards to subject, most of the films examine topics of social importance. This is not a production class. This course's goals are accomplished through lecture, discussion, preparing of academic papers and viewing of numerous socially relevant documentaries. (Winterim)

Components: Lecture
Prereqs/Coreqs: P: COMMNCTN 1630

COMMNCTN 3660 3 credits

**Broadcast Performance**
Theory and techniques of microphone and camera performance for various styles and formats of audio and video production. (Every two years)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 3240

COMMNCTN 3730 3 credits

**Project Writing and Reporting**
Students will take the skills and experience gained in previous writing courses and apply them to a significant, semester-long project that will be published in the student newspaper. Emphasis will be placed on developing a meaningful topic for a project, researching public records, conducting in-depth interviews, and melding a series of articles into a coherent package. Working in groups and optimizing the talents of individual group members is vital to success in this course. (Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 2030 or COMMNCTN 2050

COMMNCTN 3770 3 credits

**Theories of Media and Culture**
This class will examine the mass media from a critical perspective. We will examine the role of culture in everyday life and how media influences life by operating as a conduit for culture and ideology. (Spring of Even Years)

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: ENGLISH 1230 and COMMNCTN 1630

COMMNCTN 3800 3 credits

**Meetings and Events**
This course explores the meetings industry, including association, corporation, and government meetings. Students also examine conventions, trade shows, incentive travel, and special events. (Spring)

Components: Lecture
Prereqs/Coreqs: junior standing to enroll in this course

COMMNCTN 3830 3 credits

**Editing for Print**
Practice in writing and editing news copy, proof-reading, page design, headline writing, and using wire copy. Examination of personnel and ethical problems editors face. (Every two years)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 2030
COMMNCTN 3840 3 credits
Post-Production
This course offers advanced theory and practice in single camera format video production, including linear and non-linear editing. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 1250 and COMMNCTN 2050 and COMMNCTN 2070 and COMMNCTN 2530

COMMNCTN 3860 3 credits
Media Advertising and Sales
Analysis of the sales function in broadcasting and print media. Comparative strengths and weaknesses of advertising media. Theory and practice in media sales techniques. (Fall)
Components: Lecture
Prereqs/Coreqs: P: COMMNCTN 1630

COMMNCTN 3920 3 credits
Promotional Techniques
This course provides practice in developing persuasive messages through copy writing and design. Course contents will be connected to various media, including print, broadcast, and electronic message systems. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 2360 or BUSADMIN 2630

COMMNCTN 3930 3 credits
Communication Law
Legal rights and responsibilities of the media; case studies of libel, privacy invasion, contempt of court, and copyright. Comparison of legal and ethical rights. (Fall, Spring)
Components: Lecture
Prereqs/Coreqs: P: COMMNCTN 1630

COMMNCTN 4030 3 credits
Applied Communication
Practical experience in the management of the university radio station, the university television facilities, or university publications. Maximum of 8 credits of COMMNCTN 2110, COMMNCTN 3120, and COMMNCTN 4030 may be applied to the major. (Fall, Spring)
Components: Laboratory
Prereqs/Coreqs: P: consent of instructor

COMMNCTN 4050 2 credits
Professional Practice
A capstone course for advanced imaging media students to learn the skills necessary for professional life such as portfolio development and presentation, proposal writing, and research skills. (Spring)
Components: Lecture
Prereqs/Coreqs: P: consent of instructor

COMMNCTN 4140 3 credits
U. S. Investigative Journalism 1963-Present
Students will examine the role of investigative journalism in influencing cultural trends and political events since the Kennedy administration. Print journalism is the primary focus, but the rise of television journalism will be addressed. (Every two years)
Components: Lecture
Prereqs/Coreqs: P: COMMNCTN 2030

COMMNCTN 4270 3 credits
Volunteers, Fundraising, and Grants
Volunteer recruitment and management, fundraising, grant seeking, grant writing, and grant management will be investigated in this course. (Spring)
Components: Lecture
Prereqs/Coreqs: P: junior standing to enroll in this course

COMMNCTN 4500 3 credits
Photography III
Develop your critical and technical skills. This course places emphasis on craftsmanship, problem solving, and visual communications. Students will participate in critiques of their own work and that of fellow students, and work on acquisition of technical control and technique. Sequencing, context, content, and contemporary issues are discussed. A working digital single lens reflex camera is required or may be rented from the department. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMMNCTN 3500

COMMNCTN 4710 1 - 3 credits
Independent Study
Research on a topic of student interest, culminating in a final project or paper of merit, and evaluated by a staff member. (Fall, Spring, Summer)
Components: Independent Study
Prereqs/Coreqs: P: consent of department chair

COMMNCTN 4830 1 credit
Senior Seminar
A holistic view of the communication field. (Fall, Spring)
Components: Seminar
Prereqs/Coreqs: P: Communication Technologies major status and senior standing
**Computer Science Courses**

**COMPUTER 1010** 1 credit
*Introduction to Computer Science*
This course provides the opportunity for students to learn about the computer science program and resources available at UW-Platteville. Topics include the use of computers as well as issues and opportunities in computer science. (Fall)
Components: Lecture

**COMPUTER 1130** 3 credits
*Introduction to Programming*
An introduction to programming for students with no previous computer programming experience. Covers control structures, procedures, programming environments, and problem solving. (Fall, Spring, Summer)
Components: Laboratory, Lecture

**COMPUTER 1430** 3 credits
*Programming in C++*
A technical course in computing, algorithms, data representation, and procedural programming. Modularity and abstraction stressed in algorithm development. Style and documentation stressed in program development. Weekly lab programs engrain the syntax and semantics of C++. A few larger, out-of-class programs tie the concepts together. (Fall, Spring, Summer)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: previous programming experience, such as that provided by COMPUTER 1130 is recommended

**COMPUTER 1830** 3 credits
*Microcomputer Applications*
A course recommended for all non-computer science majors that need to know how to use the microcomputer. The major emphasis will be on using microcomputers with the most popular kinds of computer software used in business and education today including word processing, spreadsheets and database management. (Not open to computer science majors.) (Fall, Spring, Summer)
Components: Laboratory, Lecture

**COMPUTER 2230** 3 credits
*Programming in COBOL*
To develop an understanding of, and provide practice in the use of proper strategies and techniques for business program design and development. To develop ability to apply the COBOL language to implement problem solutions. To gain the background for further study of software design and computer programming in a business environment. Emphasis on structured programming and program style. (Spring)
Components: Lecture
Prereqs/Coreqs: P: COMPUTER 1430

**COMPUTER 2340** 3 credits
*Programming in Visual Basic*
An introduction to event driven, object-based programming techniques in Visual Basic. Students will design, code, and debug Graphic User Interface (GUI) programs and apply the technique to business applications. (Fall)
Components: Lecture

**COMPUTER 2430** 3 credits
*Object-Oriented Programming and Data Structures I*
An introduction to object-oriented programming. Emphasis on building and testing classes using software engineering techniques. Includes study of a standard class library and use of inheritance and polymorphism for building subclasses and extensibility. Coverage of the stack and queue classical data structures. Discussion of searching, sorting, and hashing techniques. Introduction to linked lists. (Fall, Spring)
Components: Laboratory, Lecture
Cross Offerings: SOFTWARE 2430
Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2430

**COMPUTER 2630** 3 credits
*Object-Oriented Programming and Data Structures II*
Continuation of the object-oriented programming and data structure topics from COMPUTER/SOFTWARE 2430. Coverage of pointers, templates, linked lists, trees, recursion, graphs, and algorithm analysis. Use of software engineering techniques such as inspections, test plans, and configuration management within a group-based project environment. (Fall, Spring)
Components: Laboratory, Lecture
Cross Offerings: SOFTWARE 2630
Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2430

**COMPUTER 2830** 3 credits
*Advanced Microcomputer Applications*
This course is designed to acquaint the students with additional microcomputer applications beyond that of COMPUTER 1830. In particular, the major emphasis will be on configuration and setup of microcomputers; communication software (the use of the Internet); presentation software; multimedia; advanced spreadsheet topics such as advanced graphing, macros, and data analysis; and an application related to the student’s major. A presentation and paper will be developed by the student on a particular software application, e.g. an expert system, an accounting package, decision making software, Human Resource Information System (HRIS), etc. (Variable)
Components: Lecture
Prereqs/Coreqs: P: COMPUTER 1830
COMPUTER 2990 1 - 3 credits

Computer Science Special Topics
The subject matter and instructor for each instance of this class will be listed in the class schedule. Students should check with the instructor for details.

Components: Lecture

COMPUTER 3030 3 credits

Artificial Intelligence
A study of knowledge representation, search techniques, expert systems, predicate calculus, and natural languages. Discussion of the successes and limitations of past and current AI programs. Programming assignments in LISP and Prolog illustrate formal topics. (Spring odd years)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2630 and MATH 2730

COMPUTER 3130 3 credits

Systems Analysis and Design
Provide an understanding of the duties of the systems analyst and the specific methods and techniques for system development (preliminary survey through system design) with an introduction to utilizing CASE software throughout the entire process. (Fall)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER 2230

COMPUTER 3230 3 credits

Computer Architecture/Operating Systems
This course combines the strengths of two areas: Assembler Language Programming and Operating Systems. The major areas of Assembler such as Architecture, Data Types, Logic and Control and Interrupts will be covered. The major areas of Operating Systems including Processes, Mutual Exclusion, Critical Sections, Parallel Processing, Real and Virtual Storage, Job Scheduling and UNIX, VMS and NT will be emphasized. (Spring)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2430

COMPUTER 3340 3 credits

Windows Programming
Continuation of Windows programming techniques. Discussion of the Component Object Model (COM), Dynamic Link Library (DLL), and the Windows Application Programming Interface (API). Study also includes the Windows common controls, some Internet controls, and Dynamic HTML (DHTML). (Spring)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2630 or (COMPUTER 2340 AND COMPUTER/SOFTWARE 2430

COMPUTER 3430 3 credits

Object Oriented Analysis and Design
Requirements engineering, analysis, and specification using the object-oriented paradigm. Object-oriented architectural and detailed design. Use of an OOA&D modeling language such as UML. Investigation of OOA&D patterns. Moderate size, group project. (Fall)

Components: Lecture
Cross Offerings: SOFTWARE 3430
Prereqs/Coreqs: P: SOFTWARE 2730 and COMPUTER/SOFTWARE 2430

COMPUTER 3520 3 credits

Programming Language Structures
A study of programming language topics which include data objects, data types, storage management, syntax, BNF descriptions, semantics, lexical analysis and parsing. Examples taken from traditional languages as well as more modern languages. (Fall)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2630

COMPUTER 3530 3 credits

Systems Development and Implementation
Strategies and techniques of analysis and design for producing logical methodologies for dealing with complexity in the development and implementation of information systems. Use of software tools, file access methods and operating system facilities. (Spring)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER 3130

COMPUTER 3630 3 credits

Database Design and Implementation
This course will explore fundamental concepts necessary for the design, use, and implementation of database systems. Study of database modeling and design, languages and facilities provided by the database management systems, and techniques for implementing database systems will be examined. Major database models will be discussed with primary focus on the relational database model and query languages. (Spring)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2430

COMPUTER 3830 3 credits

Data Communications and Computer Networks
An introduction to data communications and computer networks. Topics include network architectures and topologies, network analysis, and the layered approach to data communication, concentrating on the data link and network layers. (Fall)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2430

COMPUTER 3870 3 credits

Web Protocols, Technologies and Applications
This course will introduce the students to protocols and technologies in Web Applications and Web Services. The Client/Server concept and some advanced database concepts will also be covered. The emphasis of the course will be using tools such as ASP.NET for rapid development of Web Applications and Web Services. (Fall)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER 3340; C: 3630

COMPUTER 3920 3 credits

Computer Graphics
An introduction to computer graphics including transformations; modeling; viewing and projection; color, lighting and shading; texture mapping; interaction; and animation. Use of a pipeline-based graphics library such as OpenGL. Several programming assignments, including some games-based projects. (Fall odd years)

Components: Lecture
Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2630 and MATH 2640
Counselor Education Courses

COUNSLED 1010  1 credit
Introduction to College Life
This course is designed to provide a student with an opportunity to examine college life styles through discussion. Decision-making activities and methods of coping with anxiety and depression will be covered. Other topics covered are interpersonal relations, study skills, library resources and career choices.
 Components: Lecture

COUNSLED 2220  1 credit
Career Planning and Decision Making
An opportunity for students to explore their values, attitudes, interests, abilities, experiences and to relate them to the world of work. There will be practice in decision-making and job-hunting skills.
 Components: Lecture

COUNSLED 4250  3 credits
Group Counseling
This course presents the theory and applied models of structured, developmental group counseling. The emphasis is placed on facilitating a gradual increase in problem-solving skills leading to wellness.
 Components: Laboratory, Lecture

COUNSLED 4600  1 - 3 credits
Measurement for Counselors and Educators
A study of assessment devices and procedures in the areas of interest, attitudes, intelligence and personality; plus discussion of the theoretical bases upon which such procedures and devices are founded.
 Components: Lecture

COUNSLED 4630  3 credits
Introduction to Professional Counseling
The role of guidance in the educational process; historical, psychological, sociological and philosophical foundations of the guidance movement.
 Components: Lecture

COUNSLED 4930  1 - 3 credits
Seminar in Educational Issues
Study in depth of a current issue, idea, or topic of interest to professional educators. The topic to be covered each time is appended to the course designation in the schedule.
 Components: Seminar

COUNSLED 4990  1 - 3 credits
Individual Study in Counselor Education
An opportunity for students to engage in deeper study of topics previously considered, to broaden themselves by pursuing areas not offered within other courses, or to engage in projects and experiences otherwise not available.
 Components: Independent Study
### Criminal Justice Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 1130</td>
<td>3</td>
</tr>
<tr>
<td><strong>Introduction to Criminal Justice</strong></td>
<td></td>
</tr>
<tr>
<td>A survey of the administration of Criminal justice, including the structural components of the criminal justice system and the stages of the criminal process from the detection of crime and arrest through prosecution, adjudication, sentencing and correctional intervention; emphasis upon analysis of decisions and practices within the context of the entire criminal justice system.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
<tr>
<td>GE: Social Sciences</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 1330</td>
<td>3</td>
</tr>
<tr>
<td><strong>Introduction to Crime Scene Investigation</strong></td>
<td></td>
</tr>
<tr>
<td>This course delves into various types of technology, techniques and equipment used in crime laboratories, and various types of technology, techniques and equipment used by crime scene technicians at a crime scene. Course also provides an overview for the career of crime scene technicians.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 2130</td>
<td>3</td>
</tr>
<tr>
<td><strong>The Police Function</strong></td>
<td></td>
</tr>
<tr>
<td>The roles and functions of police in a democratic society, including their responsibilities for peacekeeping, law enforcement and service; the police as part of the criminal justice system and as agents of municipal government; models and styles of police behavior.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
<tr>
<td>Prereqs/Coreqs: P: CRIMLJUS 1130 with a “C” or better</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 2230</td>
<td>3</td>
</tr>
<tr>
<td><strong>Correctional Philosophy</strong></td>
<td></td>
</tr>
<tr>
<td>The theories, philosophies and practices of corrections; sentencing structures and their relationship to correctional objectives; the modes of correctional intervention.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
<tr>
<td>Prereqs/Coreqs: P: CRIMLJUS 1130 with a “C” or better</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 2320</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fingerprint Classification and Development</strong></td>
<td></td>
</tr>
<tr>
<td>This course delves into the theoretical and practical applications of fingerprint identification. Course involves developing latent prints from numerous sources in a laboratory setting and at a crime scene. Course also includes rolling fingerprints and fingerprint comparison using automated fingerprint identification systems. Students learn to examine and classify latent prints using the Henry alpha-numeric classification system.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
<tr>
<td>Prereqs/Coreqs: P: CRIMLJUS 1330</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 2340</td>
<td>3</td>
</tr>
<tr>
<td><strong>U.S. Courts and the Criminal Justice System</strong></td>
<td></td>
</tr>
<tr>
<td>A detailed study of the adversarial system in the United States course examining the history, tradition and philosophy underlying the system of justice as it is played out in the criminal courts, as well as administrative and civil courts, whose goal is to effect justice on the accused, with a focus on the prosecutors, defense attorneys, judges and jurors who are involved in the daily decisions about guilt or innocence, probation or prison for adult and juvenile citizen offenders as well as a secondary focus on non citizen adult and juvenile offenders.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
<tr>
<td>Prereqs/Coreqs: P: CRIMLJUS 1130 with a “C” or better</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 2420</td>
<td>3</td>
</tr>
<tr>
<td><strong>Evidence Collection and Preservation</strong></td>
<td></td>
</tr>
<tr>
<td>This course covers the process, collection and preservation of physical evidence. Includes identification and preservation of physical evidence such as hair, fibers and blood samples at crime scenes. Chain of custody procedures, recording and maintaining evidence collection storage facilities are covered.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 2520</td>
<td>3</td>
</tr>
<tr>
<td><strong>Crime Scene Processing Techniques</strong></td>
<td></td>
</tr>
<tr>
<td>Crime Scene Processing Techniques is a course designed to familiarize students with the fundamentals of crime scene processing and its application to the science and technology of criminal investigation. Students will be expected to achieve a basic knowledge of how to record and document, collect, protect and defend the credibility of evidence.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
<tr>
<td>Prereqs/Coreqs: P: CRIMLJUS 1330</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 2630</td>
<td>3</td>
</tr>
<tr>
<td><strong>Private Security Operations</strong></td>
<td></td>
</tr>
<tr>
<td>A survey of the physical, personnel and informational aspects of the security field; concept of physical information and personnel security systems integrated with management systems; controls in regard to private, public and government owned complexes.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 2830</td>
<td>3</td>
</tr>
<tr>
<td><strong>Ethnicity, Race and Crime</strong></td>
<td></td>
</tr>
<tr>
<td>A study of the correlation between ethnicity, race, crime and criminality in the United States. This course explores the interrelatedness of ethnicity, race, criminal law, and the sanctioning of criminal behavior in the United States.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
<tr>
<td>Cross Offerings: ETHNSTDY 2830</td>
<td></td>
</tr>
<tr>
<td>GE: Ethnic Studies</td>
<td></td>
</tr>
<tr>
<td>Prereqs/Coreqs: sophomore standing to enroll in this class</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIMLJUS 2930</td>
<td>3</td>
</tr>
<tr>
<td><strong>Interviewing</strong></td>
<td></td>
</tr>
<tr>
<td>Examination of the principles of effective interviewing as applied to investigative reporting, research, persuasion, counseling, employment, and the investigation of crime. The latter part of this course will pay particular attention to the theory and practice of interviewing and interrogation as applied to gaining information from complainants, witnesses, victims, informants, and suspects.</td>
<td></td>
</tr>
<tr>
<td>Components: Lecture</td>
<td></td>
</tr>
</tbody>
</table>
CRIMLJUS 3120  3 credits

Investigative Photography
Investigative Photography is a course designed to familiarize students with the fundamentals of photography and its application to the science and technology of criminal investigation. Students will be expected to achieve a basic knowledge of how to record and document, collect, protect and defend the credibility of evidence with the use of photography.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 1330

CRIMLJUS 3130  3 credits

Criminal Investigation
An introduction to the principles and procedures of criminal investigation, including the identification of physical and testimonial evidence, creation of hypotheses for the development of leads and documentation of findings.
Components: Discussion, Lecture
Prereqs/Coreqs: P: CRIMLJUS 2130 with a “C” or better and junior standing

CRIMLJUS 3140  4 credits

Criminalistics
The function and techniques of the application of scientific methods to the evaluation of physical evidence. The course examines the various analytical systems used in the evaluation of physical evidence with a balance between the theoretical framework and practical application in the laboratory.
Components: Discussion, Lecture
Prereqs/Coreqs: P: CRIMLJUS 2130 with a “C” or better and junior standing

CRIMLJUS 3230  3 credits

Comparative Criminal Justice Systems
Cultural bases of laws, development of laws, conceptions of justice and patterns of crime; comparison of American justice systems with other Western and Asian justice systems.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2130 and CRIMLJUS 2230 with a “C” or better in each and junior standing

CRIMLJUS 3330  3 credits

Police Administration
Principles of police administration and organization; detailed analysis of police administration such as budgeting, personnel management, implementation of programs toward fulfillment of objectives and decision making.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2130 with a “C” or better and junior standing

CRIMLJUS 3430  3 credits

Patterns of Criminal and Delinquent Behavior
The legal and behavioral classification of crimes and criminals based on analysis of the criminal career of the offender, group support of the behavior, society’s reaction and the response of the legal system; analysis of crimes as systems of behavior: property, violent, professional organized, victimless, white-collar, conventional and political crime.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2130 and CRIMLJUS 2230 with a “C” or better in each and junior standing

CRIMLJUS 3530  3 credits

Correctional Institutions
History, development and functions of correctional institutions including prisons and jails; their custodial and correctional programs; the impact of incarceration upon inmates; the interactional structure of the prison environment; improving conditions and correctional programs.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2230 with a “C” or better and junior standing

CRIMLJUS 3630  3 credits

Juvenile Justice
Conceptions of juvenile delinquency; the juvenile offender in the juvenile justice system; the philosophy, structure and function of juvenile courts; legal rights of accused juveniles, correctional theories, and programs in juvenile institutions; methods and models of rehabilitating juvenile offenders and prevention of juvenile delinquency.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2230 with a “C” or better and junior standing

CRIMLJUS 3730  3 credits

Women and the Law
A study of women in their legal roles as wives and mothers, workers and students, criminals and victims of crime. The course examines how the law affects women’s personal choices regarding marriage, having children, and aiming for high-level achievements in education and in work. The course also examines ways in which law affects women in poverty and in old age.
Components: Lecture
Cross Offerings: WOMSTD 3730
GE: Gender Studies, Social Sciences
Prereqs/Coreqs: P: CRIMLJUS 1130 or one course in women’s studies and junior standing

CRIMLJUS 3830  3 credits

Crime Prevention
An investigation of the prevention of crime utilizing changes in both the physical and social environment of the community.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 1130 with a “C” or better and junior standing

CRIMLJUS 3900  3 credits

Research Methods in Criminal Justice
An introduction to research methods in criminal justice and criminology, with applications to both pure and applied research. The course provides a basic conceptual framework for understanding and interpreting criminal justice research as well as designing, conducting, and evaluating research projects.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2130 and CRIMLJUS 2230 with a “C” or better in each, MATH 1830 and junior standing

CRIMLJUS 3930  3 credits

Law of Corrections
The law pertaining to the effects and consequences of conviction, sentencing and prisoner rights; the legal process in terms of post-trial motions and appeals of conviction.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2230 with a “C” or better and junior standing
CRIMLJUS 4030 3 credits
Criminal Law
A study of the principles, doctrines and selected rules of criminal law; the sources of substantive criminal law and historical development of common law principles of criminal responsibility; constitutional constraints on the decision to define behavior as criminal.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2130 and CRIMLJUS 2230 with a “C” or better in each and junior standing

CRIMLJUS 4130 3 credits
Police-Community Relations
Analysis of the interdependence of the police and community in maintaining order and controlling crime; theories of community and the community’s role in the development of police systems; tension and conflict in police-community interaction; programs and strategies for improving the quality of police-community relations.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2130 with a “C” or better and junior standing

CRIMLJUS 4230 3 credits
Community-Based Corrections
Community-based correctional programs; pre- and post-trial; a critical investigation of theories, practices and problems involved in pre-trial diversion, probation and parole.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 2230 with a “C” or better and junior standing

CRIMLJUS 4330 3 credits
Criminal Procedure and Evidence
A study of case law defining constitutional constraints on police behavior in the areas of arrest, search and seizure, interrogation, identification and investigation; rules on the exclusion of illegally seized evidence.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 4030 with a “C” or better and junior standing

CRIMLJUS 4430 3 credits
Issues in Criminal Justice Planning and Management
Problems confronting American criminal justice in the areas of criminal law, courts, law enforcement and corrections; models and alternatives for reforming the criminal justice process including program planning, development and management.
Components: Lecture

CRIMLJUS 4500 1 - 3 credits
Directed Individual Studies
Supervised individual study of a topic selected by the student with staff approval.
Components: Independent Study
Prereqs/Coreqs: P: CRIMLJUS 4030 with a “C” or better, an accumulated GPA of 2.50 and junior standing

CRIMLJUS 4530 3 credits
Social Welfare Policy
This course provides a basic conceptual framework for understanding and interpreting historical and contemporary social welfare policy proposals, methods, and alternatives to existing policies and programs such as those that impact at-risk and diverse populations. (Spring)
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 1130 with a “C” or better or PSYCHLGY 1130 with a “C” or better or SOCIOLGY 1030 with a “C” or better and junior standing

CRIMLJUS 4630 1 - 3 credits
Current Topics In Criminal Justice
Current issues in criminal justice which may not warrant a permanent course. Course content will be announced each time the course is presented.
Components: Lecture
Prereqs/Coreqs: P: CRIMLJUS 4030 with a “C” or better and junior standing

CRIMLJUS 4730 2 - 4 credits
Honors in Criminal Justice Research
The practical application of research to the criminal justice field. The student will design a complete research project within the framework of a tutorial relationship with a member of the criminal justice faculty.
Components: Independent Study
Prereqs/Coreqs: P: CRIMLJUS 4030 with a “C” or better and junior standing

CRIMLJUS 4840 3 credits
Substance Abuse: Theory, Assessment, and Intervention
This course is designed to provide an overview of chemical abuse and dependency. Included in this approach will be coverage of addiction theory, assessment and treatment of abuse and dependency. Particular attention will be spent on vulnerable populations, including teens, sexual minorities, and culturally, socially and/or economically oppressed groups.
Components: Lecture
Cross Offerings: PSYCHLGY 4840
Prereqs/Coreqs: P: CRIMLJUS 1130, PSYCHLGY 1130 or SOCIOLGY 1030 and junior standing; a biology course is recommended

CRIMLJUS 4880 8 credits
Internship
Enhancement of the educational experience through placement of a student with a governmental or private agency; emphasis placed on integration of criminal justice theory and practice through field observations, practical experience, and extensive report writing, including submission of daily reports, administrative reports and case reports.
Components: Field Studies
Prereqs/Coreqs: P: 60 credits plus 12 upper division criminal justice credits, an accumulated GPA of 2.25 and have passed the department's writing certification requirement
CRIMLJUS 4930 3 credits
**Criminal Justice Seminar**
Discussion and evaluation of problems in the contemporary criminal justice system; individual research and presentation of findings.
Components: Seminar
Prereqs/Coreqs: P: CRIMLJUS 4030 with a “C” or better and senior standing and have passed the department’s writing certification requirement

ECONOMIC 2410 3 credits
**Interpretation of Business and Economic Data**
The nature of statistical data in business and economics; the use of tabular, graphical and numerical analysis; probability, estimation and hypothesis testing; correlation and regression; index numbers, time series; and forecasting. (Fall, Spring, Summer)
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: Math 1630 or higher (3 credits)

ECONOMIC 2940 3 credits
**The Political Economy of Race, Gender and Ethnicity**
This course uses economic principles to analyze salient issues involving people of color, women, and ethnic minorities. The focus is interdisciplinary, drawing from the fields of business and political science, and others. Analysis occurs within the contextual framework provided by guest presenters having expertise in areas of race and ethnic studies and women studies. Pertinent principles and concepts are used to analyze causes and effects of the changing composition of U.S. families, to examine the nature and extent of discrimination within the U.S. economy, and to understand why issues involving race, ethnicity, and gender are of concern to us both individually and collectively. (Fall, Spring)
Components: Lecture
Cross Offerings: ETHNSTDY 2940, POLISCI 2940
GE: Ethnic and Gender, Social Sciences

---

**Economics Courses**

ECONOMIC 2130 3 credits
**Principles of Macroeconomics**
An introduction to basic economic principles with applications to current economic problems. Demand, supply and the role of prices in the U.S. economy are briefly surveyed followed by in-depth study of the national (or “macro”) economy. Topics include unemployment, inflation and economic growth; theories of economic recession and prosperity; the role of money and banking in the economy; government taxing and spending policies to stabilize the economy; and the U.S. as part of the international economy. (Fall, Spring, Summer)
Components: Lecture
GE: Social Sciences

ECONOMIC 2230 3 credits
**Principles of Microeconomics**
An introduction to basic economic principles with applications to current economic problems. Emphasis is on understanding how households and business firms make decisions in the U.S. economy. Topics include how prices are determined and how they help solve the economic problem of scarcity, the distribution of income and wealth, problems of monopoly power, labor unions and labor problems, environmental and energy concerns, and agricultural economics. (Fall, Spring, Summer)
Components: Lecture
GE: Social Sciences

ECONOMIC 2250 3 credits
**Economics and Western History I**
A historical survey of the principal problems of economics using literature dating from approximately the 4th century B.C.E. to 1870. (Fall, Spring)
Components: Laboratory
GE: Social Sciences

ECONOMIC 2260 3 credits
**Economics and Western History II**
A historical survey of the principal problems of economics using literature dating from approximately 1870’s to the present. (Fall, Spring)
Components: Lecture
GE: Social Sciences

---

ECONOMIC 3210 3 credits
**History of Economic Thought**
Economic theory from medieval to contemporary times. Economic thought in the medieval Middle East; economic theory of scholasticism, growth of commerce and mercantilist theory. The physiocratic and classical traditions of political economy. Marxian political economy. Neoclassical economics and critiques of the neoclassical theories of value and distribution. (Offered various semesters)
Components: Lecture
GE: Historical Perspective-2nd course only, Social Sciences

ECONOMIC 3220 3 credits
**Introduction to Managerial Economics**
Survey of the principal applications of the theory and analytical techniques of economics to the problems of business management. (Spring)
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: sophomore standing; recommended: ECONOMIC 2230 and ECONOMIC 2410
ECONOMIC 3330 3 credits
Intermediate Microeconomic Analysis
A critical survey of the principal concepts of modern neoclassical microeconomics and alternatives to it. Methods of economic science; measures of elasticity; theory of consumer behavior; relevant production and cost theory; industrial structure and conduct; input markets; market power and its determinants; introduction to Marxist, post-Keynesian and behaviorist research programs in economics. Applications of microeconomic theory in policy analysis pertaining to environmental and energy issues. (Spring)
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: sophomore standing; recommended: ECONOMIC 2230

ECONOMIC 3340 3 credits
Intermediate Macroeconomic Analysis
General economic theory of the determination of national income and output, employment, price level and economic growth; prefaced by a survey of national income accounting. Keynesian, monetarist, post-Keynesian, rational expectations and real business cycle theory. Macroeconomics of open economies. Macroeconomic theory is applied to the current U.S. economic situation. (Fall)
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: ECONOMIC 2130, ECONOMIC 2230 and junior standing

ECONOMIC 3420 3 credits
Consumer Economics
Focus is on how the consumer functions in the marketplace with an emphasis on consumer choice, consumer sovereignty and the economic forces that shape consumer demand. The fundamental rights of the consumer are examined and stress is placed on how an individual may become a better educated consumer as well as what government can do and is doing in the field of consumer protection. (Offered various semesters)
Components: Lecture
GE: Social Sciences

ECONOMIC 3430 3 credits
Labor Economics and Labor Relations
A beginning course in labor and industrial relations with emphasis on how wages are determined in various types of labor markets; broad social aspects of employer-employee relations; history, organization and structure of U.S. Labor unions, problems, policies and procedures in contemporary collective bargaining; and special issues involving unemployment, productivity, worker alienation, automation and investment in human capital. (Offered various semesters)
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: sophomore standing; recommended: ECONOMIC 2130 and ECONOMIC 2230

ECONOMIC 3530 3 credits
Economic History of The United States: The First Three Hundred Years
An introductory survey of the evolution of the market economy of the United States up the World War I and of American thought concerned with the problems arising from such changes.
Components: Lecture
GE: Historical Perspective
Prereqs/Coreqs: P: HISTORY 1330 and/or HISTORY 1430

ECONOMIC 3630 3 credits
Comparative Economic Systems
An analysis of various forms of capitalism and socialism, with special attention given to the economics of the United States, the Soviet Union, England, and others. (Offered various semesters)
Components: Lecture
GE: International Education, Social Sciences

ECONOMIC 3730 3 credits
Money and Banking
A survey of the monetary and banking systems of the United States as part of the nation's overall financial system. Major topics include: organization and functioning of financial intermediaries; the key economic roles of lending institutions and the Federal Reserve System; contemporary monetary theories, international financial structures. (Fall, Spring, Summer)
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: ECONOMIC 2130 and ECONOMIC 2230

ECONOMIC 3830 3 credits
Public Finance
Topics include: government expenditures, programs and public Services; principles and processes for collective decision-making; sources, principles and effects of taxes and other government revenues, and deficits, debts and budgeting in the public sector. (Fall)
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: ECONOMIC 2130 and ECONOMIC 2230

ECONOMIC 4010 1 - 3 credits
Economics Workshop
Components: Lecture

ECONOMIC 4110 3 credits
Management Science
An introduction to quantitative methods used in business. Introduction to decision theory, linear programming and its applications, network and scheduling models. (Fall)
Components: Lecture
Cross Offerings: BUSADMIN 4110
Prereqs/Coreqs: P: completion of university math requirement and ECONOMIC 2410
ECONOMIC 4330  3 credits
**International Economics**
A study of the major aspects of international trade, finance and commercial policy under changing world conditions. Subjects studied include various theories of international trade, effects of tariffs and quotas, exchange rate determination, balance of payments analysis and policy, international monetary systems, international economic institutions and current problems. (Offered various semesters)
  - Components: Lecture
  - GE: Social Sciences
  - Prereqs/Coreqs: P: ECONOMIC 2130, ECONOMIC 2230 and junior standing

ECONOMIC 4930  3 credits
**Senior Seminar**
Critical examination of select economic policy issues with active participation by Department of Economics faculty and other invited guests. (Spring)
  - Components: Seminar
  - GE: Social Sciences
  - Prereqs/Coreqs: P: junior standing; recommended: ECONOMIC 2130 and ECONOMIC 2230

ECONOMIC 4940  1 - 4 credits
**Special Problems**
Supervised reading on selected economic problems. Students may register for job orientation under this title. Appropriate forms must be filled out by students with approval of the instructor and the department chairperson. (Offered various semesters.)
  - Components: Independent Study
  - GE: Social Sciences
  - Prereqs/Coreqs: P: ECONOMIC 2130 and 2230 and junior standing

ECONOMIC 4990  1 - 8 credits
**Internship**
The practical application of marketing, finance, management and economics through on-the-job training. May be repeated for credit up to a total of eight credits. Students may not enroll for more than four credits without permission of the dean of the college. (Offered various semesters)
  - Components: Field Studies

---

**Electrical Engineering Courses**

ELECTENG 1210  3 credits
**Circuit Modeling I**
Voltage, current, resistance, and impedance. Opamps. Phasors. Ohm’s law, Kirchoff’s laws, superposition, and Thevenin’s and Norton’s theorems applied to the modeling of zero-order networks. Complex numbers and algebra. (Fall, Spring)
  - Components: Laboratory, Lecture
  - Prereqs/Coreqs: P: MATH 2640

ELECTENG 2210  4 credits
**Circuit Modeling II**
  - Components: Discussion, Laboratory, Lecture
  - Prereqs/Coreqs: P: ELECTENG 1210 and MATH 2740

ELECTENG 2220  4 credits
**Signals and Systems**
Linear system modeling with differential equations, Laplace transforms, and convolution. Transfer functions, frequency response, and Bode plots. (Fall, Spring)
  - Components: Discussion, Laboratory, Lecture
  - Prereqs/Coreqs: P: ELECTENG 2210 and MATH 2840. C: MATH 3630

ELECTENG 2950  2 credits
**Electrical Engineering Cooperative Education**
Work experience in industry under the direction and jurisdiction of College of Engineering, Mathematics and Science.
  - Components: Field Studies
  - Prereqs/Coreqs: P: sophomore standing

ELECTENG 2960  2 credits
**Electrical Engineering Cooperative Education**
Work experience in industry under the direction and jurisdiction of College of Engineering, Mathematics and Science.
  - Components: Field Studies
  - Prereqs/Coreqs: P: sophomore standing

ELECTENG 2970  1 credit
**Electrical Engineering Internship**
Work experience in industry under the direction of the Cooperative Education Office of the College of Engineering, Mathematics and Science. NOTE: This program is separate and distinct from the Cooperative Education Program and is principally designed to cover the summer vacation period.
  - Components: Field Studies
  - Prereqs/Coreqs: sophomore standing to enroll in this class

ELECTENG 3020  4 credits
**Analog Electronics**
Diode circuits. Biasing of semiconductor devices. Analysis and design of linear amplifiers. Use of opamps. (Fall, Spring)
  - Components: Discussion, Laboratory
  - Prereqs/Coreqs: P: ELECTENG 2210
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites/Corequisites</th>
</tr>
</thead>
</table>
Prereqs/Coreqs: P: ELECTENG 2210, PHYSICS 3140 and MATH 3630 |
| ELECTENG 3140 | 4 | Electric and Magnetic Fields | Electrostatics, magnetostatics, Maxwell's equations, and transmission lines. (Fall, Spring) | Components: Discussion, Lecture  
Cross Offerings: ENGRPHYS 3640  
Prereqs/Coreqs: P: ELECTENG 2220 and MATH 3630 and PHYSICS 2640 or PHYSICS 2340 |
| ELECTENG 3300 | 1 | Controls Laboratory | Laboratory projects applying the theoretical principles from MECHNCHL 4320 or ELECTENG 3310 to the control of electromechanical systems. (Fall, Spring) | Components: Laboratory  
Cross Offerings: MECHNCHL 4310  
Prereqs/Coreqs: C: ELECTENG 3330 or MECHNCHL 4320 |
| ELECTENG 3310 | 3 | Automatic Controls | Analysis and synthesis of single-input, single output linear time-invariant systems are considered through classical Laplace transform methods such as root-locus and frequency-domain techniques. The computer simulations demonstrate practical application of the concepts. (Fall, Spring) | Components: Discussion, Laboratory, Lecture  
Prereqs/Coreqs: P: ELECTENG 2220; C: ELECTENG 3300 |
| ELECTENG 3410 | 4 | Electric Power Engineering | Introduction to electromechanics, generators, transformers, transmission lines, motors and network analysis. (Fall, Spring) | Components: Discussion, Laboratory, Lecture  
Prereqs/Coreqs: P: PHYSICS 2340 or PHYSICS 2640 and GENENG 2930 with a “B” or better or ELECTENG 2210 |
| ELECTENG 3770 | 4 | Logic and Digital Design | Introduction to digital logic. Boolean algebra. MSI and LSI. Combination and sequential network design, prototyping, and testing. State machine design and implementation. Introduction to HDL and programmable logic devices. (Fall, Spring) | Components: Laboratory, Lecture  
Prereqs/Coreqs: P: ELECTENG 1210 |
| ELECTENG 3780 | 4 | Introduction to Microprocessors | Introduction to microprocessor assembly language programming. Fundamentals of microprocessor architecture, data representation, and arithmetic. System debugging. Interfacing and interrupts. Microprocessor and microcontroller-based system design, testing, and implementation. (Fall, Spring) | Components: Laboratory, Lecture  
Prereqs/Coreqs: P: COMPUTER 1430 and ELECTENG 3770 |
| ELECTENG 3950 | 2 | Electrical Engineering Cooperative Education | Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science. | Components: Field Studies  
Prereqs/Coreqs: P: junior standing |
| ELECTENG 3960 | 2 | Electrical Engineering Cooperative Education | Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science. | Components: Field Studies  
Prereqs/Coreqs: P: junior standing |
| ELECTENG 3970 | 1 | Electrical Engineering Internship | Work experience in industry under the direction of the department chair and the Cooperative Education Office of the College of Engineering, Mathematics and Science. NOTE: This program is separate and distinct from the Cooperative Education Program and is principally designed to cover the summer vacation period. | Components: Field Studies  
Prereqs/Coreqs: junior standing to enroll in this course |
| ELECTENG 4010 | 1 | UHF Amplifier Design | Scattering parameters, the Smith Chart, lumped-element impedance matching, transistor characterization, device stability, UHF CAD techniques, and transistor bias techniques. | Components: Lecture  
Prereqs/Coreqs: P: ELECTENG 3020 |
| ELECTENG 4020 | 1 | UHF Oscillator Design | Scattering parameters, the Smith Chart, transistor characterization, device destabilization, lumped-element impedance matching, UHF CAD techniques, output power prediction, and transistor bias techniques. | Components: Lecture  
Prereqs/Coreqs: P: ELECTENG 3020 |
| ELECTENG 4050 | 4 | Advanced Analog Electronic Circuits | Design of discrete and integrated electronic circuits used in communication systems, such as oscillators, modulators, low-noise amplifiers, and class AB, B, and C power amplifiers. (Spring) | Components: Discussion, Laboratory, Lecture  
Prereqs/Coreqs: P: ELECTENG 3020 and ELECTENG 3130 |
ELECTENG 4310 4 credits
Modern Control Systems
State space modeling of systems, solution of state equations, controllability and observability, Lyapunov stability, minimum realization, and state feedback design. (Spring Odd Years)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 3310 or MECHNCHL 4330

ELECTENG 4320 4 credits
Digital Signal Processing
Discrete time systems, frequency response of linear time invariant systems, discrete Fourier transform, FFT. Design of FIR and IIR digital filters. (Spring Even Years)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 2220

ELECTENG 4350 4 credits
Discrete Time Control Systems
Z-transforms, sampling theory, analysis and design of digital control systems. (Fall)
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 3020 and ELECTENG 3410

ELECTENG 4430 4 credits
Power Electronics and Electrical Machines
DC machines and DC machine control; power electronic switches, converter systems: AC-to-AC, AC-to-DC, DC-to-DC, and DC-to-AC; harmonics, real and complex power in power electronic systems. (Fall Odd Years)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 3310

ELECTENG 4440 4 credits
Electric Motor Drives
Theory and operation of modern AC electric motor drives, multiple reference frame theory for three-phase AC system, the dynamic modeling of induction machines, the operation of the fully controlled three-phase power converters, the speed and torque control of induction motors, the Voltage/Hertz control, permanent magnet synchronous motor drives, DC motor drives. (Fall Even Years)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 3020 and ELECTENG 3410

ELECTENG 4450 4 credits
Power Systems Analysis and Design
Power systems modeling, load flow, economic dispatch, stability, fault analysis, computer simulation of systems analysis. (Spring)
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 3410

ELECTENG 4610 4 credits
Communication Systems
Analysis and design of amplitude, angle, and pulse code modulation systems. (Fall, Spring)
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 2220 and ELECTENG 3020 and ELECTENG 3770

ELECTENG 4620 4 credits
Optical Systems
Geometric and physical optics, lasers, light emitting diodes, optical detectors, optical signal processing, holography, nonlinear optics, integrated optics, optical fibers, optical communications systems. (Spring)
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 3610 or ELECTENG 4610

ELECTENG 4630 4 credits
Advanced Communication Systems
Probability theory, random signals, performance and design of CW and pulse modulation systems, information and coding theory. (Fall)
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 3610 or ELECTENG 4610

ELECTENG 4720 4 credits
Microcomputer Architecture and Interfacing
Computer architecture including processor design, microprogrammed control, memory organization, interconnection structures, input/output, interfacing techniques, and parallel processing. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 3780

ELECTENG 4750 4 credits
Advanced Digital Design
Introduction to semi-custom integrated circuit design; design methodology (design entry, simulation, cell placement, and macro libraries); optimization of designs based on macro libraries; design for testability; logic simulation; placement and routing algorithms for gate arrays and standard cells; PLA-based programmable logic devices; programmable gate arrays; design projects using CAD systems. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: ELECTENG 3140 and ELECTENG 3780; C: ELECTENG 3130

ELECTENG 4980 1 - 4 credits
Current Topics in Engineering
In depth study of a current topic of interest to the engineering profession. The topic to be covered will be identified in the course title.
Components: Lecture

ELECTENG 4990 1 - 3 credits
Independent Study
Advanced study in use of specialization selected by student and approved by faculty member.
Components: Independent Study
Energy Courses

ENERGY 2130 3 credits
**Energy, Environment, and Society**
The course will provide the student with an overview of issues related to energy and renewable energy, including usage trends, historical patterns, social responses to energy changes, economic factors, market forces, geographical concerns, the various forms and sources of energy including renewable energy and bio-energy, how these sources may affect the environment, and recent developments in energy policies in the U.S. and the world. Energy, power, energy sources as well as usage patterns by societies over history will be presented. Field trips may be required in this course.

Components: Lecture  
GE: Social Sciences  
Prereqs/Coreqs: P: ENGLISH 1230

ENERGY 3240 4 credits
**Fundamentals of Energy Sources**
Traditional, renewable, and bio-energy sources and their characteristics. Advantages and disadvantages of existing and future sources of energy and bio-products. Economic and environmental impact comparisons of various energy sources including wind, photovoltaic, hydrogen, geothermal, and bio-fuels. Field trips may be required in this course.

Components: Laboratory, Lecture  
Prereqs/Coreqs: P: ENERGY 2130

ENERGY 3950 2 credits
**Renewable Energy Cooperative Education**
Enhancement of the educational experience through the placement of a student with a business, industry, or institution under the direction of the director of renewable energy program. During co-op, the student is expected to be away from his/her studies at UWP and work for a company or institution for a semester. (Spring or Fall)

Components: Field Studies  
Prereqs/Coreqs: P: minor in Renewable Energy, junior standing and ENERGY 2130

ENERGY 3970 1 credit
**Renewable Energy Internship**
Enhancement of the educational experience through the placement of a student with a business, industry, or institution under the direction of the director of renewable energy program. Internship is designed to provide experiential learning experience to the student during the summer period. (Summer)

Components: Field Studies  
Prereqs/Coreqs: P: minor in Renewable Energy, junior standing and ENERGY 2130

ENERGY 4920 2 credits
**Research or Design Project on Renewables**
An open-ended comprehensive research or design project will be done on renewable energy, bio-energy, or bio-products by multi-disciplinary teams. Discussion and experiences in project management, team work, and ethics will be included. A written report and formal presentation are required.

Components: Laboratory  
Prereqs/Coreqs: P: ENERGY 3240 and senior standing

ENERGY 4980 1 - 3 credits
**Current Topics in Energy**
In-depth study of a current topic of interest in energy area. The course aims to better prepare students in the Minor by providing the latest developments in the energy area and involving students in finding, assimilating and presenting current literature and research. Topics to be covered will be identified by the instructor at the time of the offering.

Components: Lecture  
Prereqs/Coreqs: P: consent of instructor

ENERGY 4990 1 - 3 credits
**Independent Study**
Advanced study or research in an area of specialization selected by student and approved by faculty member.

Components: Independent Study  
Prereqs/Coreqs: P: consent of instructor

English Courses

ENGLISH 1130 3 credits
**Freshman Composition**
Rhetorical principles of writing--the sentence, the paragraph and the essay--with practice in reading and writing prose. (Fall, Spring, Summer)

Components: Lecture  
GE: English  
Prereqs/Coreqs: P: ENGLISH 0010 or a score above the 10th percentile, according to state norms, on the UW-System English Placement Test

ENGLISH 1230 3 credits
**Freshman Composition**
A continuation of English 1130 with particular emphasis on argumentation, research and documentation, and writing essays based on inductive analysis. (Fall, Spring, Summer)

Components: Lecture  
GE: English  
Prereqs/Coreqs: P: ENGLISH 1130 or test-out

ENGLISH 1330 3 credits
**Introduction to Literature**
A course designed to introduce the student to the understanding and enjoyment of literature through different literary genres--fiction, poetry and drama--and to acquaint the students with such literary terms as plot, theme, character, setting, form, and interpretation. Does not count towards English major. (Fall, Spring)

Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 1430 3 credits
**Thematic Studies in Literature**
A specific social, cultural and intellectual theme as expressed in selected literary works. The themes vary (e.g., The West in American Literature, The Image of Woman in Literature, Science Fiction, The Theme of Crime and Justice, The Supernatural and Occult); therefore, this course may be taken more than once for credit, provided the content is different each time.

Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230
ENGLISH 2050  3 credits

Science Fiction
An introduction to the science fiction genre; texts studied will include short stories, novels and films.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 2120  3 credits

Creative Writing
An introduction to the craft of fiction, poetry, and drama, with the opportunity to create each. Students need a basic foundation in writing before taking before taking the course. (Fall)
Components: Lecture

ENGLISH 2130  3 credits

English Literature: Beginnings Through the Commonwealth
British literature through the Puritan Age, including such writers as Chaucer, More, Spenser, Shakespeare, Donne, and Milton. (Fall)
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 2150  3 credits

Introduction to Gay Studies
Introduction to Gay Studies is an interdisciplinary course covering the history, culture, and politics of gay men, lesbians, bisexuals, and transgendered persons around the world. The course seeks to theorize, document, uncover, and revise our existing knowledge about same-sex attraction and gender identity and also examine a wide range of related historical figures and events. Using the lenses of social science, science, and the humanities, the course explores ways in which sexual orientation and gender limit and expand individual experience.
Components: Lecture
GE: Humanities-2nd course only, International Education
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 2230  3 credits

English Literature: Restoration Through the Romantic Age
English literature from the Restoration through the Romantic age, including such writers as Dryden, Swift, Pope, Johnson, Coleridge, Wordsworth, Byron, Shelley, and Keats.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 2250  3 credits

Introduction to Film
“Introduction to Film” develops students’ abilities to view films critically and deepen their understanding of the principal film genres through careful study of their historical contexts and cinematic techniques. The course focuses on the study of different genres and aesthetic schools of film, such as the French New Wave, German Expressionism, westerns, war films, musicals, and film noir, in terms of how they present aesthetic detail, ideological points of view (such as issues of gender and race), as well as fulfill certain expectations of the spectator. After a thorough grounding in the conventions of traditional genre in cinema, the class will also focus on the ways in which it has been revised by filmmakers in more recent periods of cinematic history.
Components: Discussion, Lecture
GE: Humanities-2nd course only
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230
ENGLISH 2830  3 credits  
Survey of Women Writers  
Survey of women writers in the English language with a focus on the themes, issues, and concerns that tie women’s writing together and create a ‘women’s literary tradition.’ British, American, and international writers are included. (Fall)  
Components: Lecture  
GE: Ethnic and Gender, Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 2780  3 credits  
Race and Gender in American Film  
This course will offer students a lens through which to study the changing role of race and gender in American society and will explore how the American film industry reflects the larger inequities in American cultural, economic, and artistic structures which disempower women and people of color. The course will examine films by men and non-minorities to analyze stereotypes and misconceptions of women and people of color that continue to be disseminated via film. More importantly, though, the course will introduce students to a wide range of unfamiliar films, both contemporary and recovered from a submerged film history, written and directed by women and people of color, both men and women.  
Components: Lecture  
GE: Ethnic and Gender, Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 2770  3 credits  
International Cinema  
This course will offer students an avenue to satisfy international education and humanities general education requirements via study of a wide range of films from different eras, nations, and cultures. This course seeks to introduce students to global history of film as an art form and how international cinema both responds to and influences film styles that are more familiar to American students. Such a breadth of knowledge will both expand students’ knowledge of world cinema but also enrich students’ appreciation of American film by placing it in an international context. Finally, the course will examine not only diverse films but will also seek to understand the cultural and historical context which gave rise to these films.  
Components: Lecture  
GE: Humanities, International Education  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 2930  3 credits  
Minority Women Writers of the United States  
Literature written by Native-American women, African-American women, Latina-American women, and Asian-American women. Includes investigation of historical and cultural backgrounds as well as literary traditions of minority women of the United States. Students will read authors such as Alice Walker, Toni Morrison, Maya Angelou, Maxine Hong Kingston, Sandra Cisneros, Louise Erdrich, Leslie Marmon Silko, and others. (Fall, Spring)  
Components: Lecture  
Cross Offerings: ETHNSTDY 2930, WOMSTD 2930  
GE: Ethnic and Gender, Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3000  3 credits  
Technical Writing  
Technical description and explanation, job applications and business correspondence, and reports suited to one’s major (e.g. a criminal or safety investigation, feasibility study or grant proposal); oral presentations; technical editing. Emphasis on clarity, conciseness, precision and effective communication with lay audiences and management. (Fall, Spring)  
Components: Lecture  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3110  3 credits  
Gay and Lesbian Literature for Young Adults  
An analysis of selected gay and lesbian literature and films especially suitable for young adults of high school age with an emphasis on approaches and methods for teaching literature and addressing the needs of GLBTQ students.  
Components: Lecture  
GE: Humanities-2nd course only  
Prereqs/Coreqs: P: ENGLISH 1230

ENGLISH 3120  3 credits  
Seminar in Creative Writing  
Continuation of English 2120 with an emphasis on creating a unified work of fiction, poetry, drama, or screenwriting. This course can be repeated for credit. (Spring)  
Components: Seminar  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3130  3 credits  
The English Novel Through the Romantic Movement  
The development of the British novel through the Romantic movement, including such writers as Defoe, Richardson, Fielding, Sterne, Smollett, Austen and the Brontes. (Every other Fall)  
Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3140  3 credits  
Poetry Writing  
Poetry writing is an exploration of the various elements and techniques involved in the craft and art of writing poems. The course will focus primarily on writing workshops in which students and faculty learn to critique one another’s work, but will also include in-class writing activities and class discussions of assigned readings. Students will read, discuss, and analyze a range of poetry from traditional to contemporary poets. (Every other Fall)  
Components: Lecture  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230
ENGLISH 3230  3 credits  
**The English Novel and Short Story Since the Romantic Movement**

The novel and the short story in Britain from Dickens to the present, including such writers as Thackeray, Meredith, Eliot, Hardy, Trollope, Conrad, Galsworthy, Joyce, Mansfield, Woolf, Lawrence, Huxley, Maugham, Forster and Greene. (Every other Spring)  
Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3240  3 credits  
**Advanced Writing**

An advanced writing course concentrating on rhetorical and research strategies, prose styles, and their practical application to understanding and evaluating current and traditional essays as well as contemporary media such as film, television, and advertising. (Spring)  
Components: Lecture  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3250  3 credits  
**Sociolinguistics**

Introduction to problems of language, pedagogy, and cultural political relevant for English education. Discusses linguistic theories informing language pedagogy, language acquisition, different models of language learning, American dialects, language and gender, language disorders, and systems of literacy.  
Components: Lecture  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3260  3 credits  
**Language and Culture**

Examines the theoretical and practical relationship between language and selected social and cultural aspects of human life. Discusses contiguities of linguistic and cultural practices; examines how particular language practices create and maintain social structures, and how discourse reflects social structures and cultural values.  
Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3280  3 credits  
**Gay and Lesbian Literature**

While focusing primarily on contemporary gay and lesbian fiction, this course also provides an overview of the evolution of international gay and lesbian literature from its beginnings to the present, including such authors as Sappho, Hafiz, Sadi, Whitman, Wilde, Cather, Woolf, Forster, Gide, Hughes, Lorca, Rimbaud, Stein, Baldwin, Bishop, Ginsberg, and Lorde.  
Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1230

ENGLISH 3330  3 credits  
**English Drama**

Drama in Great Britain (exclusive of Shakespeare) from its beginning to the present, including such figures as Marlowe, Jonson, Beaumont, Fletcher, Webster, Dryden, Congreve, Sheridan, Shaw, O’Casey, Eliot, Osborne and Pinter. (Every other Fall)  
Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3360  3 - 6 credits  
**Magazine Writing and Editing**

An advanced writing and editing course concentrating on planning, creating, and evaluating written copy for print and on-line magazines. Emphasizes both preparing the student’s work for trade publications, and studying and practicing the processes of those publications. (Fall)  
Components: Lecture  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3410  3 credits  
**Chicano Literature**

An examination of representative texts from various Chicana/Chicano writers, covering a range of genres and generations. There will be an emphasis on the relationship between literary production and historical context, in particular, the involvement of the writers in the social and political conflicts affecting the Chicano community. (Every other Spring)  
Components: Lecture  
Cross Offerings: ETHNSTDY 3410  
GE: Ethnic Studies, Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3430  3 credits  
**Development of the American Novel**

The evolution of the American novel from its beginnings to the present, including such authors as Hawthorne, Melville, James, Hemingway, Chopin, Faulkner and Morrison. (Every other Fall)  
Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3530  3 credits  
**Modern American Drama**

American plays from World War I to the present, including such playwrights as O’Neill, Rice, Wilder, Hellman, Williams, Miller, Albee, Wilson, Hansberry, and Henley. (Every other Fall)  
Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3630  3 credits  
**Mark Twain and American Humor**

The structure and literary art of American humor as exemplified by Mark Twain and other writers, including Artemus Ward, Finley Peter Dunne, Ring Lardner, James Thurber, Kurt Vonnegut and Woody Allen. (Every other Spring)  
Components: Lecture  
GE: Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230
ENGLISH 3730  3 credits
Black Literature in America
A survey of African American literature beginning in the ante bellum period and continuing to the present, including oral forms (folk tales and spirituals), novels, poetry, drama, autobiography, and other selected non-fiction. (Spring)
Components: Lecture
Cross Offerings: ETHNSTDY 3730
GE: Ethnic Studies, Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3740  3 credits
Asian American Literature
A survey of Asian-American literature beginning in the early 1900s and continuing to present times. Includes works of fiction, autobiography, poetry, and drama. Focuses on writers from different literary and oral traditions including (but not limited to) Mandarin Chinese, Japanese, Thai, Hmong, Vietnamese, and Indian, and examines the impact of family, culture, and gender both within these traditions and between a particular tradition and U.S. popular culture. (Fall)
Components: Lecture
Cross Offerings: ETHNSTDY 3740
GE: Ethnic Studies, Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3750  3 credits
American Literature of Ethnicity and Immigration
An examination of literature from a variety of U.S. “racial” and “ethnic” groups, including African-, Italian-, Mexican-, Jewish-, Asian-, and Native-American. Emphasis will be placed on the meanings of “race” and “ethnicity,” the effects of immigration, and the impact of gender in this literature. (Fall)
Components: Lecture
Cross Offerings: ETHNSTDY 3750
GE: Ethnic Studies, Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3760  3 credits
Wisconsin Indian Literature
An exploration of Wisconsin Indian literatures from the oral tradition to the present; texts studied will include epics, legends, poetry, novels, and selected non-fiction, including such writers as Mountain Wolf Woman, Louise Erdrich, and Susan Power. (Fall)
Components: Lecture
Cross Offerings: ETHNSTDY 3760
GE: Ethnic Studies, Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3770  3 credits
The Modern Short Story
The development of the short story as a modern literary genre. (Every other Fall)
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3820  3 credits
Modern Poetry
A study of poetry written since World War I, including such poets as Pound, Eliot, Lorca, Yeats, Rilke, Williams, Frost and Thomas. (Every other Spring)
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3830  3 credits
The World Novel
A careful study of selected novels exclusive of English and American. Content and focus may vary in different semesters and may include such writers as Dostoyevsky, Flaubert, Mann, Kafka, Cortazar, Achebe, Lagerkivist, Kawabata, and Dinesen. (Every other Spring)
Components: Lecture
GE: Humanities, International Education
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3850  3 credits
Postcolonial Literature
A study of literature that addresses both the history and legacy of colonialism. The readings will focus on writing in English from non-European countries. Content and focus may vary in different semesters and may include writers from Africa (such as Chinua Achebe, Nuruddin Farah, or Wole Soyinka), India (such as Bharati Mukherjee, Arundhati Roy, or Salman Rushdie), the Caribbean (such as Jamaica Kincaid, V. S. Naipaul, or Derek Walcott), and Ireland (such as Brian Friel, Seamus Heaney, or Paul Muldoon).
Components: Lecture
GE: Humanities, International Education
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230 and sophomore standing or consent of the instructor

ENGLISH 3890  3 credits
Film and Literature
Film adaptations of representative fictional texts, such as historical romances, gothic novels, short stories, and plays, will be viewed, as students read the original texts on which they are based. A study will be made of the connection between literature and film, or the translation of words into sound, pictures, and dialogue. Some theory of film will also be introduced. The ultimate goal of the course will be to arrive at a method of critically viewing films and of critically reading literature, through an examination of the same story as it is told through different media. (Every other Fall)
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230
ENGLISH 3910 3 credits

Classical Mythology
Studying classical mythology as presented in ancient Greek and Roman epic, drama, and poetry provides a gateway to appreciating over two millennia of literature, art, philosophy, religion, politics and more. Classical mythologies influence cannot be overstated. Knowing these works is an essential part of understanding what we are as human beings. Students will read some of the essential works of classical mythology, including such works as Hesiod’s Theogony, Homer’s Odyssey, Aeschylus’ Agamemnon, Sophocles’ Oedipus Rex, Virgil’s Aeneid, and Ovid’s Metamorphoses.

Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3930 3 credits
Literature for Young Adults
An analysis of selected novels, plays, and poetry especially suitable for young adults of middle or high school age with an emphasis on approaches and methods for teaching literature. (Spring)

Components: Lecture
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3940 3 credits
Grammar in Context
Attention given to both traditional and modern (functional) grammar, including the parts of speech, phrases, clauses, sentence patterns, and their combinations into a variety of sentence types and paragraph patterns. Practical application of grammatical concepts in a writing- and reading-intensive environment, with attention to the logic of punctuation and conventional mechanics. (Fall)

Components: Lecture
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 3950 3 credits
Writing for Performance
Focuses on producing written work that might reasonably be performed in front of an audience rather than merely read. May include plays, monologues, dialogues, comic routines, performance art scripts, and dramatic lyrics. (Spring)

Components: Lecture
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4020 3 credits
History and Theory of Rhetoric
This course is designed for students who will use and/or teach rhetoric strategies and structures in the professional world. From speech and communication theory to the teaching of critical and interpretational writing and reading, the study of rhetoric’s place in the history of ideas will help students to understand the place and power of language in the university and the professional work place. (Occasionally)

Components: Lecture
Cross Offerings: SPEECH 4020
GE: Humanities-2nd course only
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4030 3 credits
Major English Writers
An intensive study of selected major English writers including Chaucer and Milton. (Every other Fall)

Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4080 3 credits
Medieval Lyric Poetry
The course emphasizes reading the original language, analyzing the contents, and writing interpretations of Middle English lyrics. Topics include nature, love and sex, humor, festivals, religion, and death. Latin, troubadour, Celtic, and Anglo-Norman poetry (in translation) will provide a context for the Middle English works. Some attention will be given to published criticism of selected poems. (Every other Spring)

Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230 and sophomore standing

ENGLISH 4300 3 credits
English Renaissance Poetry and Prose
An intensive look at the poetry and prose of this period providing students with a greater appreciation of and a methods for studying this literature. This course will introduce students to a number of important literary genres, including the pastoral, the elegy, the sonnet, Ovidian poetry, travel literature, and the epic; the intellectual thought underlying much of this work (e.g., issues of the Reformation, Neo-Platonism, Humanism, Machiavellianism); and the influence of classical and continental literature. (Every other Fall)

Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4330 3 credits
Shakespeare
A study of Shakespeare’s plays, with representative selections from the histories, the tragedies, and both the early and the late comedies. (Spring)

Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230
ENGLISH 4430 3 credits

Major American Writers
An intensive study of selected major American writers. (Every other Spring)
- Components: Lecture
- GE: Humanities
- Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4500 3 credits

Women and Mythology: Goddess, Witch, Sibyl
This course takes a comparative and interdisciplinary approach to numinous images of the feminine as they appear internationally. By exploring pre-historical, historical, and contemporary manifestations of goddess-centered mythology and religious practices around the world, students will broaden their understanding of women's contributions to the literary and spiritual traditions of many cultures. (Every other Fall)
- Components: Lecture
- Cross Offerings: WOMSTD 4500
- GE: Gender Studies, Humanities, International Education
- Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4530 3 credits

Literature and the Critic
An examination and evaluation of theories of literature and the role of the artist in society from Plato to the present, including such writers as Plato, Aristotle, Longinus, Sidney, Lessing, Schlegel, Arnold, Sainte-Beuve, Eliot, Richards, Frye and Bush. (Every other Fall)
- Components: Lecture
- GE: Humanities
- Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4620 3 credits

History of the English Language
Beginning with the relationship between the Indo-European languages, this course traces the origins of writing and the historical development of English grammar, vocabulary, and sound systems from Old to Modern English, including American and Colonial. It surveys language change within its historical, political, cultural, and technological contexts, including how these forces may shape our language's future. (Spring)
- Components: Lecture
- Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4670 3 credits

Methods of Teaching English as a Second Language
Examines the characteristics of second or other language acquisition and how they influence the effectiveness of different methods of teaching English as a Second Language. Includes teacher/learner characteristics and strategies, teaching varieties of language, review of methodologies, communicative competence, and syllabus design. (Occasionally)
- Components: Lecture
- Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4680 1 - 8 credits

Writing/Editing Internship
Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the writing or editing assignment, type of experience, number of credits, and evaluation procedure to be stipulated in a statement of agreement between student and department.
- Components: Field Studies
- Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ENGLISH 4730 3 credits

Teaching of English in Middle and Secondary Schools
The objectives, methods and materials dealing with the teaching of middle or high school English. Does not count toward the English major or minor. (Spring)
- Components: Lecture
- Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230 and ENGLISH 3030 and junior standing; C: ENGLISH 3930

ENGLISH 4740 3 credits

Practicum in Teaching English as a Second Language
Observing teachers and students in TESL settings, participating in TESL teaching and tutoring activities including lesson preparation, and evaluating the teaching/learning experiences. (Occasionally)
- Components: Lecture
- Prereqs/Coreqs: P or C: ENGLISH 4670

ENGLISH 4920 1 - 4 credits

Independent Study in English
Independent study culminating in a written report or research paper. Each student selects the topic in consultation with the instructor.
- Components: Independent Study
- Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230 and senior standing. For English majors and minors only. May not be taken in lieu of regularly scheduled classes

Engineering Physics Courses

ENGRPHYS 2950 2 credits

Engineering Physics Cooperative Education
Work experience in industry under the direction and jurisdiction of the College. Credits do not fulfill any graduation requirements.
- Components: Field Studies
- Prereqs/Coreqs: P: sophomore standing

ENGRPHYS 2960 2 credits

Engineering Physics Cooperative Education
Work experience in industry under the direction and jurisdiction of the College. Credits do not fulfill any graduation requirements.
- Components: Field Studies
- Prereqs/Coreqs: P: sophomore standing
ENGRPHYS 2970  1 credit

Engineering Physics Internship
Work experience in industry under the direction of the Cooperative Education Office of the College. Credits do not fulfill any graduation requirements. This program is distinct from the Cooperative Education Program and is designed to cover summer work experience.

Components: Field Studies

ENGRPHYS 3240  4 credits

Applied Mechanics
Newtonian mechanics of particles and rigid bodies, including oscillations and central force motion, with applications to mechanical design. Introduction to Lagrangian and Hamiltonian methods. (Fall)

Components: Lecture
Prereqs/Coreqs: P: PHYSICS 2640 or PHYSICS 2340, GENENG 2130; C: MATH 3630

ENGRPHYS 3640  4 credits

Electric and Magnetic Fields
Electrostatics, magnetostatics, Maxwell's equations, and transmission lines. (Fall, Spring)

Components: Discussion, Lecture
Cross Offerings: ELECTENG 3140
Prereqs/Coreqs: P: ELECTENG 2220 and MATH 3630 and PHYSICS 2640 or PHYSICS 2340

ENGRPHYS 3930  3 credits

Microsystems and Nanotechnology
An overview of the basic science and engineering of microelectronics and microelectromechanical systems (MEMS) is presented: fundamental concepts of semiconductors and mechanics; microfabrication processes and surface micromachining; electrostatic sensing and actuation. CAD-based MEMS design and visualization software is taught and used for student group design projects. Course includes and introduction to the sub-100 nanometer scale aspects of chemistry, physics, and biology, and how these aspects can be combined to provide solutions to engineering problems. Recent applications will be presented as case studies, including sensors, biology & medicine, electronics, and new materials. Principles of operation of several measurement techniques that underpin this field will be presented, as well social, legal, and ethical aspects of applied Microsystems and nanoscience. (Spring)

Components: Lecture
Prereqs/Coreqs: P: junior standing in Mechanical, Electrical, Engineering Physics, Biology, Chemistry or consent of instructor

ENGRPHYS 3950  2 credits

Engineering Physics Cooperative Education
Work experience in industry under the direction and jurisdiction of the College. Credits do not fulfill any graduation requirements.

Components: Field Studies
Prereqs/Coreqs: P: junior standing

ENGRPHYS 3960  2 credits

Engineering Physics Cooperative Education
Work experience in industry under the direction and jurisdiction of the College. Credits do not fulfill any graduation requirements.

Components: Field Studies
Prereqs/Coreqs: P: junior standing

ENGRPHYS 3970  1 credit

Engineering Physics Internship
Work experience in industry under the direction of the Cooperative Education Office of the College. Credits do not fulfill any graduation requirements. This program is distinct from the Cooperative Education program and is designed to cover summer work experience.

Components: Field Studies

ENGRPHYS 4010  2 credits

Engineering Physics Lab
Experiments in physics, introduction to experimental techniques, systems engineering, and methods of experiment design. (Fall)

Components: Laboratory
Prereqs/Coreqs: P: PHYSICS 3140

ENGRPHYS 4140  4 credits

Applied Optics
Geometric and physical optics applied to the design of optical systems: polarization, dispersion, interference and diffraction, absorption, optical fibers, and lasers. (Spring)

Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: PHYSICS 3140

ENGRPHYS 4210  2 credits

Sensor Lab
Study of the physics exploited by the most basic types of sensors, including photoelectric, electromechanical, resistive, inductive, capacitive, and chemical. Includes a study of the basic building blocks of a sensor system: the sensor itself, signal conditioning electronics, and computer interfacing. (Fall)

Components: Laboratory
Prereqs/Coreqs: P: PHYSICS 3140, ELECTENG 2210, COMPUTER 1430; C: ENGRPHYS 4010

ENGRPHYS 4220  2 credits

Applications of Modern Physics
Applications of quantum mechanics, statistical mechanics, and solid state physics to engineering and technology. (Fall)

Components: Lecture
Prereqs/Coreqs: P: PHYSICS 3140; C: MATH 3630

ENGRPHYS 4930  3 credits

Engineering Physics Design
Integration of technical knowledge in an open-ended, comprehensive design project which simulates an engineering project environment, including teamwork, project management, and oral and written reports.

Components: Laboratory, Lecture
Prereqs/Coreqs: P: ENGRPHYS 4010 and student must be within one year of graduation

ENGRPHYS 4980  1 - 3 credits

Special Topics in Engineering Physics
A presentation of selected contemporary topics in physics.

Components: Lecture

ENGRPHYS 4990  1 - 4 credits

Independent Study in Engineering Physics
Study of special topics and/or developments of special projects having department approval.

Components: Independent Study
Ethnic Studies Courses

ETHNSTDY 1030 3 credits  
**Race, Gender, and Class**  
An examination of the concepts of race, gender, and class in the United States as these influences are related historically to form a matrix that then serves as a comprehensive basis for understanding the contemporary American society.  
Components: Lecture  
GE: Ethnic and Gender

ETHNSTDY 2130 3 credits  
**The Native American Experience**  
“The Native American Experience” is an examination of the indigenous peoples of North America with particular emphasis on the area now call the United States.  
Components: Lecture  
GE: Ethnic Studies, Humanities

ETHNSTDY 2200 3 credits  
**Introduction to Ethnic Studies**  
An examination of the concepts, issues and experience of People of Color in the U.S. with emphasis on the historical and contemporary interaction of race, gender, and class within and external to communities of color.  
Components: Lecture  
GE: Ethnic Studies

ETHNSTDY 2230 3 credits  
**Black Experience in the U.S.**  
The course will examine the development of Black culture in the U.S. and how slavery, social and political structures in the U.S. influenced the development of Black culture. We will also focus on various accounts of the nature of racial ideology, and the construction of racial identities.  
Components: Lecture  
GE: Ethnic Studies

ETHNSTDY 2730 3 credits  
**Art History IV: Ethnic Art in the United States**  
Course explores influences of a variety of cultures on art of present-day America. The focus is on the art of Africa, Mexico and Native America and on contemporary artists whose work grows out of those and other traditions.  
Components: Lecture  
Cross Offerings: ART 2730  
GE: Ethnic Studies, Fine Arts

ETHNSTDY 2750 3 credits  
**Native American Art**  
Art of various culture groups of American Indians, ranging from the Inuit of the far north to tribes and nations of the southwest. Ancient and traditional art forms will be studied as well as history of art in times of culture contact and conflict, continuing through work created by contemporary tribal artists informed by those traditions.  
Components: Lecture  
Cross Offerings: ART 2750  
GE: Ethnic Studies, Fine Arts

ETHNSTDY 2830 3 credits  
**Ethnicity, Race and Crime**  
A study of the correlation between ethnicity, race, crime and criminality in the United States. This course explores the interrelatedness of ethnicity, race, criminal law, and the sanctioning of criminal behavior in the United States.  
Components: Lecture  
Cross Offerings: CRIMLJUS 2830  
GE: Ethnic Studies  
Prereqs/Coreqs: sophomore standing to enroll in this class

ETHNSTDY 2930 3 credits  
**Minority Women Writers of the United States**  
Literature written by Native-American women, African-American women, Latina-American women, and Asian-American women. Includes investigation of historical and cultural backgrounds as well as literary traditions of minority women of the United States. Students will read authors such as Alice Walker, Toni Morrison, Maya Angelou, Maxine Hong Kingston, Sandra Cisneros, Louise Erdrich, Leslie Marmon Silko, and others. (Fall, Spring)  
Components: Lecture  
Cross Offerings: ENGLISH 2930, WOMSTD 2930  
GE: Ethnic and Gender, Humanities  
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ETHNSTDY 2940 3 credits  
**The Political Economy of Race, Gender and Ethnicity**  
This course uses economic principles to analyze salient issues involving people of color, women, and ethnic minorities. The focus is interdisciplinary, drawing from the fields of business and political science, and others. Analysis occurs within the contextual framework provided by guest presenters having expertise in areas of race and ethnic studies and women studies. Pertinent principles and concepts are used to analyze causes and effects of the changing composition of U.S. families, to examine the nature and extent of discrimination within the U.S. economy, and to understand why issues involving race, ethnicity, and gender are of concern to us both individually and collectively. (Fall, Spring)  
Components: Lecture  
Cross Offerings: ECONOMIC 2940, POLISCI 2940  
GE: Ethnic and Gender, Social Sciences

ETHNSTDY 3010 3 credits  
**Race, Gender, and United States Labor History**  
Social, cultural, and economic history of American working people from the colonial period to the present.  
Components: Laboratory, Lecture  
Cross Offerings: HISTORY 3010  
GE: Ethnic Studies, Historical Perspective
ETHNSTDY 3230 3 credits
**Human Relations**
Social stratification based upon race and nationality and cultural differences. Prejudice and discrimination are analyzed and the causes of both are studied. Using cross-cultural comparisons, students are helped to gain a better understanding of the forces which promote conflict and those that promote accommodation or harmony. The role of textbook and literature materials in promoting or reducing race and ethnic hostility is analyzed through study of both texts and literature.
Components: Lecture
Cross Offerings: SOCIOLGY 3230
GE: Ethnic and Gender, Social Sciences
Prereqs/Coreqs: P: SOCIOLGY 1030

ETHNSTDY 3240 3 credits
**African-American History 1619 to Present**
The historical experience of African-Americans since 1619.
Components: Lecture
Cross Offerings: HISTORY 3240
GE: Ethnic Studies, Historical Perspective
Prereqs/Coreqs: P: HISTORY 1330 or HISTORY 1430 or consent of instructor or department chair

ETHNSTDY 3340 3 credits
**Management, Gender and Race**
This course reviews the changing nature of management and explains why gender and race/ethnicity have become important concerns of business. It examines the status of women and people of color in managerial or administrative positions and discusses socialization processes, stereotypes, equal employment opportunity laws, diversity management, illegal harassment, and power in organizations. Networking, mentoring, work/life balance, and career planning also are addressed.
Components: Lecture
Cross Offerings: BUSADMIN 3340, WOMSTD 3340
GE: Ethnic and Gender

ETHNSTDY 3400 3 credits
**History of Chicano Peoples in the U.S.**
An examination of the history of the indigenous people(s) in the Americas who experienced the Spanish conquest and colonization and their subsequent inclusion in the United States as a result of U.S. expansion, war, economic imperialism, and migration within the Americas.
Components: Lecture
GE: Ethnic Studies, Historical Perspective

ETHNSTDY 3410 3 credits
**Chicano Literature**
An examination of representative texts from various Chicana/Chicano writers, covering a range of genres and generations. There will be an emphasis on the relationship between literary production and historical context, in particular, the involvement of the writers in the social and political conflicts affecting the Chicano community. (Every other Spring)
Components: Lecture
Cross Offerings: ENGLISH 3410
GE: Ethnic Studies, Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ETHNSTDY 3630 3 credits
**Ethnic and Gender Equity in Education**
To increase an appreciation, understanding, and awareness of ethnic and gender equity issues in the educational process and in society. The student will view equity issues through research, historical, philosophical, sociological, and psychological perspectives and the implications that each arena has on the lives of all of us. (Field experience 25 hours)
Components: Discussion, Lecture
Cross Offerings: TEACHING 3630, WOMSTD 3630
GE: Ethnic and Gender

ETHNSTDY 3720 3 credits
**Ethnic Rights and Politics**
Changing patterns of ethnic, gender and race relations; legislative and judicial developments affecting civil rights; political movements, political, social and economic discrimination; judicial system and legal protection for civil rights. Women and other minorities.
Components: Lecture
Cross Offerings: POLISCI 3730
GE: Ethnic Studies, Social Sciences
Prereqs/Coreqs: P: POLISCI 1230 or consent of instructor

ETHNSTDY 3730 3 credits
**Asian American Literature**
A survey of Asian-American literature beginning in the ante bellum period and continuing to the present, including oral forms (folk tales and spirituals), novels, poetry, drama, autobiography, and other selected non-fiction. (Spring)
Components: Lecture
Cross Offerings: ENGLISH 3730
GE: Ethnic Studies, Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ETHNSTDY 3740 3 credits
**Black Literature in America**
A survey of African American literature beginning in the early 1900s and continuing to present times. Includes works of fiction, autobiography, poetry, and drama. Focuses on writers from different literary and oral traditions including (but not limited to) Mandarín Chinese, Japanese, Thai, Hmong, Vietnamese, and Indian, and examines the impact of family, culture, and gender both within these traditions and between a particular tradition and U.S. popular culture. (Fall)
Components: Lecture
Cross Offerings: ENGLISH 3740
GE: Ethnic Studies, Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ETHNSTDY 3750 3 credits
**American Literature of Ethnicity and Immigration**
An examination of literature from a variety of U.S. “racial” and “ethnic” groups, including African-, Italian-, Mexican-, Jewish-, Asian-, and Native-American. Emphasis will be placed on the meanings of "race" and "ethnicity," the effects of immigration, and the impact of gender in this literature. (Fall)
Components: Lecture
Cross Offerings: ENGLISH 3750
GE: Ethnic Studies, Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230
ETHNSTDY 3760 3 credits
Wisconsin Indian Literature
An exploration of Wisconsin Indian literatures from the oral tradition to the present; texts studied will include epics, legends, poetry, novels, and selected non-fiction, including such writers as Mountain Wolf Woman, Louise Erdrich, and Susan Power. (Fall)
Components: Lecture
Cross Offerings: ENGLISH 3760
GE: Ethnic Studies, Humanities
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

ETHNSTDY 3830 3 credits
Black Women and Feminism in the U.S.
An interdisciplinary examination of the historical and contemporary relationship between black women in the United States and the feminist movement. Authors discussed may include Frances Harper, Ida Wells-Barnett, bell hooks, and Audre Lorde, and others.
Components: Lecture
Cross Offerings: WOMSTD 3830
GE: Ethnic and Gender
Prereqs/Coreqs: sophomore standing to enroll in this class

French Courses

FRENCH 1040 4 credits
Elementary French
Conversation, grammar, reading, writing; emphasis on oral practice, structure, vocabulary; language lab.
Components: Laboratory, Lecture

FRENCH 1140 4 credits
Elementary French
Continuation of French 1040; language lab.
Components: Laboratory, Lecture
GE: Humanities-2nd course only
Prereqs/Coreqs: P: FRENCH 1040 or equivalent

FRENCH 2040 4 credits
Intermediate French
Conversation, review of grammar, reading of stories, emphasis on oral practice, French culture; language lab.
Components: Laboratory, Lecture
GE: Humanities
Prereqs/Coreqs: P: FRENCH 1140 or equivalent

FRENCH 2140 4 credits
Intermediate French
Continuation of French 2040, with emphasis on reading and discussion in French; language lab.
Components: Laboratory, Lecture
GE: Humanities
Prereqs/Coreqs: P: FRENCH 2140 or equivalent

FRENCH 3000 1 - 4 credits
Foreign Languages Travel Abroad Seminar
A seminar with emphasis on language, literature and culture. Non-language students may take this course in English translation for credit in humanities but receive no foreign language credit. Students receive from 1 to 4 credits in French or in literature translation for non-language students. Number of credits depends on duration of exposure, the amount of reading, and the quality of written work.
Components: Seminar
GE: Humanities
Prereqs/Coreqs: P: FRENCH 2040 or equivalent; non-language students should consult the department chairperson

FRENCH 3220 2 credits
Advanced French Grammar and Composition
A broad review of French grammar with an emphasis on practical application through the assignment of various composition topics and other writing activities.
Components: Lecture
Prereqs/Coreqs: P: FRENCH 2140 or equivalent

FRENCH 3240 2 credits
Advanced French Conversation
This course stresses the development of conversational skills in French at an advanced level, with special emphasis on proper pronunciation and intonation, as well as the correct use of vocabulary and syntax.
Components: Lecture
Prereqs/Coreqs: P: FRENCH 2140 or equivalent

FRENCH 3530 1 - 3 credits
Topics in French Literature and Culture
Specific topics dealing with the works of one author, one literary genre or one literary period. Topics may also deal with specific aspects of culture. Due to the limited focus of the course, this course may be taken more than once for credit, provided the content is different.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: FRENCH 2140 or equivalent

FRENCH 4050 1 - 4 credits
Supervised Independent Study
For advanced students wishing to acquaint themselves further with French literature, or civilization; discussion and written reports. By special permission of the instructor--number of credits will be determined at the beginning of the course.
Components: Independent Study
Prereqs/Coreqs: P: FRENCH 2140 or equivalent

FRENCH 4060 3 credits
Survey of French Literature and Culture I
An introduction to French history, culture and literature from the Middle Ages through the French Revolution; lecture and discussion in French.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: FRENCH 2140 or equivalent
FRENCH 4160 3 credits
Survey of French Literature and Culture II
Continuation of French 4060, covering the 19th and 20th centuries.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: FRENCH 2140 or equivalent

General Engineering Courses

GENENG 1000 1 credit
Engineering Success Skills
An introductory course which will provide the opportunity for new engineering students to develop and improve their problem-solving ability, computer literacy, and study skills to maximize their chances for success in their college careers and prepare them for subsequent engineering courses. Topics include: making the transition from high school to college; time management; exploration of the engineering disciplines, learning styles, introduction to computer skills including spreadsheets, word processing and presentation software; engineering ethics, and introduction to engineering methods. Eight week course which meets two hours per week. (Fall, Spring)
Components: Lecture
Prereqs/Coreqs: C: MATH 1530 or higher

GENENG 1030 1 credit
Introduction to Engineering Projects
An introductory course which will provide the opportunity for new engineering students to explore the UWP engineering programs through seven hands-on engineering modules, representing the seven engineering disciplines at UW-Platteville. Emphasis will be placed on written and oral communication skills, data collection and analysis, computer application skills and group work. Semester course which meets two hours per week. (Fall, Spring)
Components: Lecture
Prereqs/Coreqs: P: GENENG 1000; C: Math 1530 or higher or consent of department chair

GENENG 1320 2 credits
Engineering Computer Graphics
Problems relative to points, lines and planes in space; Cartesian coordinates; projection-plane theory; orthographic pictorials; dimensioning; auxiliary views; sections; extensive use of computer-aided design (AutoCAD and solid modeling) including 2D and 3D drawing, editing and enhancing; emphasis on development of the ability to communicate graphically; special emphasis on engineering and computer graphics applications. Two 112 minute classes per week. (Fall, Spring)
Components: Laboratory
Prereqs/Coreqs: P or C: GENENG 1000 and MATH 2530

GENENG 2030 3 credits
Engineering Modeling and Design
An introduction to design tools and practices associated with the design and development of engineering systems. Students will gain experience with solid modeling tools, including part modeling, assembly modeling and the reading and creation of layout drawings. The project portion of the course will focus on “reverse engineering”. Reverse engineering will be used to examine the design of existing systems (objects such as: a fishing reel, a small refrigerator, a hair dryer, and similar), their assembly, and the engineering principles that form the foundation for the product. Students will model these systems and suggest possible design changes that might lead to improvements in form, function, and/or assembly.
Components: Laboratory, Lecture
Prereqs/Coreqs: C: MATH 2640

GENENG 2130 3 credits
Engineering Mechanics-Statics
Composition, resolution and equilibrium of forces and force systems; analysis of structures; friction; centroids; moment of inertia. (Fall, Spring, Summer)
Components: Lecture
Prereqs/Coreqs: P or C: GENENG 1030 and MATH 2740

GENENG 2220 2 credits
Engineering Mechanics-Dynamics
Kinematics and kinetics of particles and rigid bodies in translation; rotation and general plane motion; Newton's law, work-energy methods; linear and angular momentum. (Fall, Spring, Summer)
Components: Lecture
Prereqs/Coreqs: P: GENENG 2130 with a grade of “C” or better

GENENG 2230 3 credits
Engineering Mechanics-Dynamics
Kinematics and kinetics of particles and rigid bodies in translation; rotation and general plane motion; Newton's law, work-energy and impulse methods; linear and angular momentum; impacts; systems of particles and introduction to 3-D kinetics. (Fall, Spring, Summer)
Components: Lecture
Prereqs/Coreqs: P: GENENG 2130 with a grade of “C” or better

GENENG 2340 4 credits
Mechanics of Materials
Simple stress and strain; design and investigation of joints, beams, torsion members and columns; evaluation of shear, moment, slope and deflection of beams and combined stresses. (Fall, Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: GENENG 2130 with a grade of “C” or better
**GENENG 2630**  
3 credits  
Basic Thermoscience for Engineers
Thermodynamic properties; first and second laws of thermodynamics; ideal gas equation of state; steam properties; properties of incompressible substances; refrigerants; carnot cycle; rankine cycle; otto and diesel cycles; refrigeration; conduction and convection heat transfer. Not open to Mechanical Engineering majors. (Fall, Spring, Summer)  
Components: Lecture  
Prereqs/Coreqs: P: MATH 2840 and PHYSICS 2530 or PHYSICS 2240

**GENENG 2820**  
2 credits  
Engineering Economy
Application of principles of economic analysis to engineering decision making; time value of money; uniform annual cost; present worth; rate of return; benefit-cost ratio; depreciation; income taxes; inflation. (Fall, Spring, Summer)  
Components: Lecture  
Prereqs/Coreqs: P: GENENG 1030 and sophomore standing

**GENENG 2930**  
3 credits  
Applications of Electrical Engineering
Electric circuit analysis techniques; transients; AC analysis; power in AC circuits; transformers; and introduction to three-phase circuits. (Fall, Spring, Summer)  
Components: Laboratory, Lecture  
Prereqs/Coreqs: P: PHYSICS 2640 or PHYSICS 2340; not open to Electrical Engineering majors

**GENENG 4000**  
1 - 3 credits  
Research in Microsystems and Nanotechnology
Students will learn research methods applied to microsystems and nanotechnology, including the use of scientific literature and the evaluation of data. Research projects may be interdisciplinary, involving aspects of biology, chemistry, physics, and engineering, and they may involve experiments and/or modeling and simulation. Results will be presented in a final report. This course is required for the Minor in Microsystems and Nanotechnology. (Fall, Spring)  
Components: Lecture  
Prereqs/Coreqs: P: ENGRPHYS 3930

**GENENG 4230**  
3 credits  
Design and Simulation of MEMS
This course is structured to give the students the tools to design, digitally fabricate, and simulate reliable MEMS devices. It will include in-depth study of mechanics and microelectronics concepts and how to couple them to design functioning MEMS. Since MEMS are fabricated using brittle materials, then probabilistic design concepts are introduced. Students will understand failure modes in MEMS and how to design for reliability. FEA software is used to simulate and probabilistically design MEMS. Students will also learn how to digitally fabricate MEMS using CAD based design layout and visualization software. (Fall)  
Components: Lecture  
Prereqs/Coreqs: P: ENGRPHYS 3930 and MATH 3630

---

**Geography Courses**

**GEOGRPHY 1020**  
1 credit  
Foundational Geographic Skills
This course provides an opportunity for new students to learn about the geography program, staff and resources available at UW-Platteville. It is designed to help new geography students make a successful transition to college life. Students will be given opportunities to develop skills to excel in and beyond college.  
Components: Lecture  
Prereqs/Coreqs: P: Geography Major or Minor

**GEOGRPHY 1040**  
4 credits  
Planet Earth
The features of the natural environment (lithosphere, atmosphere and hydrosphere); their character, distribution, origin and relationship with man. Principles of environmental conservation are also included. A field trip is required. Not open to students who have had Geography 1140 or Geography 1240.  
Components: Laboratory, Lecture  
GE: Natural Science

**GEOGRPHY 1140**  
4 credits  
Global Landforms
This course is the study of the distribution of landforms across the globe, with consideration of the processes and historical factors that determine these patterns. Lab techniques will include map basics, regional landscapes and field techniques. Field trips are required.  
Components: Laboratory, Lecture  
GE: International Education, Social Sciences

**GEOGRPHY 1230**  
3 credits  
Survey of Cultural Geography
The features of the human environment (demographics, agriculture, industry, economics, politics, language, and religion); their character, distribution, origin, and relationships with each other and the physical environment.  
Components: Lecture  
GE: International Education, Social Sciences

**GEOGRPHY 1240**  
4 credits  
Physical Geography: Weather and Climate
Elements and controls of weather and climate; origin, characteristics and distribution of climate and vegetation.  
Components: Laboratory, Lecture  
GE: Natural Science

**GEOGRPHY 1260**  
1 credit  
United States Geography
While Japanese students commonly have a good background in geography, the faculty at NCFL has requested that we develop a one credit course in the Geography of the United States. They see a particular advantage in having Japanese students study U.S. geography while in this country. The emphasis in this one credit course will be on cultural and economic geography.  
Components: Lecture
GEOGRPHY 1330  3 credits
World Regional Geography
Geographic understanding of the major regions of the world; emphasis is placed upon human-environmental relationships.
Components: Lecture
GE: International Education, Social Sciences

GEOGRPHY 1340  4 credits
Biogeography
This course introduces students to the distribution of biota worldwide, both past and present, and the factors that determine these patterns. Topics discussed include evolution, extinction, dispersal, altitudinal zonation, zoogeographic provinces, regional climate, vegetation structure, ecological succession, species richness, global climate change, biomes, and island biogeography.
Components: Laboratory, Lecture
GE: Natural Science

GEOGRPHY 1370  4 credits
Global Vegetation
This course is a survey of the geographical distribution of vegetation types and habitats, with consideration of the environmental and historical factors that determine these patterns. Field and Lab techniques will be introduced.
Components: Laboratory, Lecture
GE: Natural Science

GEOGRPHY 2230  3 credits
Geographic Information Systems: Thematic Mapping
Designing and creating geographic and attribute computer databases for the production of maps, including projections, methods of data reduction, and symbologies.
Components: Laboratory, Lecture
GE: International Education, Natural Science

GEOGRPHY 2250  3 credits
Tropical Marine Ecosystems
This course is built around a three week summer field course based at the University of the South Pacific’s Marine Studies Program, taught by experts in their field at UWP and USP. Topics for study will include tropical marine environment, communities, and conservation. There will be several required field excursions.
Components: Lecture
Cross Offerings: BIOLOGY 2250
GE: International Education, Natural Science
Prereqs/Coreqs: P: one previous course in geography, geology, biology or consent of instructor

GEOGRPHY 3030  3 credits
Economic Geography
Location, aerial variation, functional and spatial interrelationships of the production, exchange, and consumption of goods and services.
Components: Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: GEOGRPHY 1330 or consent of the instructor

GEOGRPHY 3120  3 credits
Geography of Wisconsin
A regional approach to the cultural, economic and physical geography of Wisconsin.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: GEOGRPHY 1040 or GEOGRPHY 1140 or GEOLOGY 1040 or GEOLOGY 1140

GEOGRPHY 3130  3 credits
Geography of the United States and Canada
A regional approach to the cultural, economic and physical geography of the United States and Canada.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: GEOGRPHY 1230 or GEOGRPHY 1330 or consent of instructor

GEOGRPHY 3170  3 credits
Space, Place, and Gender
An introduction to gender and geography. The role of gender in the study of geography, which is concerned with places, linkages, patterns of flow, locations, landscape, and the social/political/economic production of space.
Components: Discussion, Lecture
Cross Offerings: WOMSTD 3170
GE: Gender Studies, Social Sciences

GEOGRPHY 3230  3 credits
Geographic Information Systems: Vector Fundamentals
Explores the fundamental principles of numerical data entry, digitizing, data manipulation and analysis, and the interpretation of spatially referenced data, using the family of GIS functions in a vector GIS. (Recommend completing GEOGRPHY 2230 before enrolling in this course.)
Components: Laboratory, Lecture

GEOGRPHY 3330  3 credits
Environmental Conservation
The relationship of humans and the natural environment. Topics include environmental world views, the effects of ecosystem disruption, and use and misuse of natural resources.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: junior standing or consent of instructor

GEOGRPHY 3350  3 credits
Geography and Development of the Middle East
Geography
The geographic region of the Middle East is comprehensively studied, both regionally and topically. Topics include those both from physical and human geography. Specifically, it examines why countries that comprise the Middle East are among the most contentious in the world today. In addition, we will examine variation in levels of development among various Middle Eastern peoples, countries and regions.
Components: Discussion, Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: GEOGRPHY 1330 or consent of the instructor
GEOGRPHY 3430 3 credits
Geography of Africa
The geographic region of Africa is comprehensively studied, both regionally and topically. Topics include those from both physical and human geography.
Components: Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: a 1000-level course in geography or consent of instructor

GEOGRPHY 3520 3 credits
Remote Sensing and Photogrammetry
An introduction to the theory and interpretation of remote sensing imagery, with emphasis on photographic, thermal, and microwave remote sensing systems. Stereo pair photos from aircraft will be used to illustrate geographic and environmental applications of remote sensing, such as their use in mapping and measuring features on the earth’s surface.
Components: Laboratory, Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: a 1000-level course in geology or geography or consent of the instructor

GEOGRPHY 3530 2 - 3 credits
Topics in Regional Geography
Selected world regions are studied in a traditional regional or topical format.
Components: Lecture
GE: International Education, Social Sciences

GEOGRPHY 3540 4 credits
Oceanography
An exploration of the World's oceans and the fundamentals of Physical, Biological, and Cultural Oceanography. Students will investigate the patterns and process in the oceans, and spatially integrate them over space and time. Field trip required.
Components: Laboratory, Lecture
GE: Natural Science

GEOGRPHY 3570 3 credits
Geography of Latin America
The geographic region of Latin America is comprehensively studied, both regionally and topically. Topics include those from both physical and human geography.
Components: Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: a 1000-level course in geography or consent of instructor

GEOGRPHY 3570 3 credits
Coastal Ecosystems
This course is a survey of the geographical distribution of coastal ecosystems, with consideration of the geographical and biological factors that determine these patterns. Writing and oral presentation techniques will be introduced.
Components: Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: a previous course in geography or biology or consent of instructor

GEOGRPHY 3720 3 credits
Geographic Information Systems: Digital Image Analysis
Theory and techniques for digital image processing (DIP) of digital earth resources satellite imagery and incorporation into geographic information systems. The course will emphasize visual interpretation and the use of statistical operations on the computer for automatic interpretation and enhancement.
Components: Laboratory, Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: GEOGRPHY 2230 or GEOGRPHY 3230 or 3 credits of a computer-related course

GEOGRPHY 3730 3 credits
Geography of Europe
The geographic region of Europe, including Russia, the Baltic States, Ukraine, Belarus, and Moldova, is comprehensively studied, both regionally and topically. Topics include those from both physical and human geography.
Components: Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: a 1000-level course in geography or consent of instructor

GEOGRPHY 3750 1 - 4 credits
Field Geography of the Western United States
This course is built around an extended field experience in selected regions of the western United States. Topics for study will include physical, human, and environmental geography.
Components: Discussion, Lecture
Prereqs/Coreqs: P: a previous course in geography or consent of instructor

GEOGRPHY 3840 4 credits
Soil Geomorphology
Soil development emphasizing the relationship to the landscape throughout the Quaternary. Field trips are required.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: GEOGRPHY 1040 or GEOGRPHY 1140 or GEOLOGY 1140 or consent of instructor

GEOGRPHY 3850 3 credits
Geography of the National Parks
This course examines the National Park System (NPS) of the United States from a geographic perspective. The course will use the NPS as a lens through which to examine issues of geographic importance, including those from physical, human, and environmental geography. There will be a required field trip.
Components: Discussion, Lecture
Prereqs/Coreqs: P: a previous course in geography and consent of instructor; consent of instructor for those without a previous geography course will be given only infrequently and only for students with exceptional aptitude and geographic promise

GEOGRPHY 3930 3 credits
Geography of Asia
A regional and topical comprehensive study of the geographic regions of South Asia, Southeast Asia, and East Asia. Topics include those from both physical and human geography.
Components: Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: a 1000-level course in geography or consent of instructor
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOGRPHY 3960</td>
<td>6</td>
<td>Geography of Japan</td>
<td>A detailed study of Japan, featuring its physical, cultural, human, demographic, and political geography. The heart of the course will be a six week field study in Japan. Components: Field Studies GE: International Education</td>
</tr>
<tr>
<td>GEOGRPHY 4030</td>
<td>3</td>
<td>Geography Seminar</td>
<td>Development of geographic thought, library research techniques, organization and presentation of research data. Components: Seminar Prereqs/Coreqs: P: at least junior standing and geography major or minor</td>
</tr>
<tr>
<td>GEOGRPHY 4120</td>
<td>2 - 3</td>
<td>Topical Seminar</td>
<td>A specific geographic topic within a seminar format. Components: Laboratory, Seminar Prereqs/Coreqs: P: junior standing</td>
</tr>
<tr>
<td>GEOGRPHY 4150</td>
<td>3</td>
<td>Climate Change</td>
<td>This course will cover the current and past climate changes that impact the Earth. An emphasis will be placed on how current climate changes are impacting people. Components: Lecture Prereqs/Coreqs: P: any physical geography course or consent of instructor</td>
</tr>
<tr>
<td>GEOGRPHY 4230</td>
<td>3</td>
<td>Political Geography</td>
<td>The interrelationships of earth and state, the geographical explanation of international relations, an examination of the geopolitics of several countries. Components: Lecture GE: International Education, Social Sciences Prereqs/Coreqs: P: 3 credits of geography</td>
</tr>
<tr>
<td>GEOGRPHY 4250</td>
<td>3</td>
<td>Development Geography</td>
<td>This course examines the relationship between the discourses and practices of development and global inequality. Drawing on feminist, Marxist, post structural and post colonial theoretical frameworks, we will explore how development has been theorized and practiced over the last fifty years, and assess the impact on those places subjected to development policy and planning in less developed countries. Components: Discussion, Lecture GE: International Education, Social Sciences Prereqs/Coreqs: P: any human geography course, preferably Geography 3030 or consent of instructor</td>
</tr>
<tr>
<td>GEOGRPHY 4350</td>
<td>3</td>
<td>Gender Relations in Cross-Cultural Perspective</td>
<td>This course examines how people’s gender roles are defined across cultures. Specifically we examine implications of these definitions with respect to various issues such as division of labor within households, gender differentiated health issues, domestic violence, gender and politics. We address these issues at a variety of geographic scales ranging from household to the national and global. Critical thinking, analysis, research and writing skills will also be developed. Components: Discussion, Lecture GE: Gender Studies, Social Sciences Prereqs/Coreqs: P: GEOGRPHY 3170 or consent of instructor</td>
</tr>
<tr>
<td>GEOGRPHY 4530</td>
<td>3</td>
<td>Historical Geography of the United States</td>
<td>Recreation of past geographies; changes through time in the physical and cultural environment. Components: Lecture Prereqs/Coreqs: P: 3 credits in geography or consent of instructor</td>
</tr>
<tr>
<td>GEOGRPHY 4550</td>
<td>4</td>
<td>Process Geomorphology</td>
<td>This is an advanced course about the processes that shape the Earth surface. Topics of study will include the evolution and distribution of Earth’s surface features (landforms) and the processes that have shaped them. Lab work will include field, laboratory and map analysis of landforms and sediments. Components: Laboratory, Lecture Prereqs/Coreqs: P: GEOGRPHY 1040, GEOGRPHY 1140, GEOLOGY 1140 or consent of instructor</td>
</tr>
<tr>
<td>GEOGRPHY 4660</td>
<td>1 - 8</td>
<td>Cooperative Field Experience</td>
<td>Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement learning contract) between the student and the department. Components: Field Studies</td>
</tr>
<tr>
<td>GEOGRPHY 4760</td>
<td>1 - 8</td>
<td>Geography Field Study</td>
<td>Field trip of one to eight weeks duration to study regional or systematic geography firsthand in North America or overseas. Components: Field Studies GE: Social Sciences</td>
</tr>
<tr>
<td>GEOGRPHY 4920</td>
<td>1 - 3</td>
<td>Independent Study in Geography</td>
<td>Independent work on a particular topic or problem supervised by a staff member. Components: Independent Study</td>
</tr>
<tr>
<td>GEOGRPHY 4331</td>
<td>3</td>
<td>Geographic Information Systems: Raster Fundamentals</td>
<td>Explores the fundamental principles of numerical data entry, digitizing, data manipulation and analysis, and the interpretation of spatially referenced data, using the family GIS functions in a raster GIS. Components: Lecture Prereqs/Coreqs: P: GEOGRPHY 2230 or GEOGRPHY 3230</td>
</tr>
</tbody>
</table>
Geology Courses

GEOLOGY 1140 4 credits
Physical Geology
The physical and chemical earth, materials of the earth's crust and interior, their compositions, distributions, origins, and the processes that modify them; minerals and rocks; interpretation of topographic maps and aerial photographs; field trips.
Components: Laboratory, Lecture
GE: Natural Science

GEOLOGY 1240 4 credits
Historical Geology
The formation and development of the earth and the development of life through geologic time. Laboratory includes review of minerals and rocks; elements of stratigraphy; paleontology; and field trips.
Components: Laboratory, Lecture

GEOLOGY 2330 3 credits
History of Life
The history of life as revealed by the fossil record. Current views on evolutionary patterns and extinctions. Field trips, laboratory; morphology of major fossil groups, modes of preservation, techniques.
Components: Laboratory, Lecture
GE: Natural Science

GEOLOGY 3030 3 credits
Oceanography
Chemical and physical nature of sea water and its movements, the ocean floor and its sediments, submarine volcanology, and marine biology.
Components: Lecture

GEOLOGY 3040 4 credits
Mineralogy and Lithology
A condensed course on earth materials for majors in science and engineering. A paragenetic approach is used to study minerals with associated rocks. Laboratory emphasizes identification, classification. Field trips and research paper and presentation required.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: GEOLOGY 1140 or GEOLOGY 3130

GEOLOGY 3130 3 credits
Engineering Geology
Geology applied to the solution of a variety of problems in the field of civil engineering; field trips. Morphology, evolutionary trends and stratigraphic significance of fossil invertebrates; some micropaleontology; field trips.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: CHEMISTRY 1240 and CHEMISTRY 1450

GEOLOGY 3230 3 credits
Sedimentary Geology
The formation, identification, and significance of sedimentary rocks with emphasis on those found in the Midwest; stratigraphy and earth history. Research paper and presentation required. Field trips.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: GEOLOGY 1140 or GEOLOGY 3130; GEOLOGY 3040 is recommended

GEOLOGY 3430 3 credits
Hydrogeology
Applied geological concepts and theory of water resources, including both groundwater and surface water. Field trips. Research paper and presentation required.
Components: Lecture
Prereqs/Coreqs: P: GEOLOGY 1140 or GEOLOGY 3130; CHEMISTRY 1240 is recommended

GEOLOGY 3520 2 credits
Air Photo Interpretation
Use of air photos in geographical research and in other social and physical sciences; emphasis on identification of natural and cultural features.
Components: Laboratory, Lecture

GEOLOGY 3830 3 credits
Field Methods and Mapping
Field techniques for bedrock and surficial studies. Local field trips. Research paper and presentation, and final map project required.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: (GEOLOGY 1140 or GEOLOGY 1240 or GEOLOGY 3130) and (GEOLOGY 3040 or GEOLOGY 3230)

GEOLOGY 4030 3 credits
Economic Geology
The origin and geology of mineral deposits, energy resources, precious metals and gems, and agricultural and construction materials derived from geologic sources.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: GEOLOGY 1140 or GEOLOGY 3130; GEOLOGY 3040 is recommended

GEOLOGY 4120 2 - 3 credits
Topical Seminar
A particular geologic topic within a seminar format.
Components: Laboratory, Seminar

GEOLOGY 4340 4 credits
Regional Geomorphology of the United States
The structure, origin and distribution of the landforms of the United States; secondary emphasis on the methods of landform analysis.
Components: Lecture

GEOLOGY 4660 1 - 8 credits
Cooperative Field Experience
Components: Field Studies

GEOLOGY 4920 1 - 3 credits
Individual Research in Geology
Supervised research by individual students; written report required.
Components: Independent Study
German Courses

GERMAN 1240 4 credits
**Elementary German**
Conversation, grammar, reading and writing; emphasis upon oral practice in the language laboratory.
Components: Laboratory, Lecture

GERMAN 1340 4 credits
**Elementary German**
Continuation of German 1240; language lab.
Components: Laboratory, Lecture
GE: Humanities-2nd course only
Prereqs/Coreqs: P: GERMAN 1240 or equivalent

GERMAN 2240 4 credits
**Intermediate German**
Intensive and extensive reading of German plays, novels and short stories; review of grammar; emphasis on oral practice in the language lab.
Components: Laboratory, Lecture
GE: Humanities
Prereqs/Coreqs: P: GERMAN 1340 or equivalent

GERMAN 2340 4 credits
**Intermediate German**
Continuation of German 2240; language lab.
Components: Laboratory, Lecture
GE: Humanities
Prereqs/Coreqs: P: GERMAN 2240 or equivalent

GERMAN 3000 1 - 4 credits
**Foreign Languages Travel Abroad Seminar**
A seminar with emphasis on language, literature and culture. Non-language students may take this course in English translation for credit in the humanities but receive no foreign language credit. Students receive from one to four credits in German-or in literature in translation for non-language students. Number of credits depends on the duration of the exposure, the amount of reading, and the quality of written work.
Components: Seminar
GE: Humanities, International Education
Prereqs/Coreqs: P: GERMAN 2340 or equivalent; non-language students should consult the department chairperson

GERMAN 3220 2 credits
**German Conversation and Composition I**
This course stresses basic German conversation as reflected in readings in the humanities (short stories, essays, social and cultural portrayals of the German world, etc.) and in real-life situations.
Components: Lecture
Prereqs/Coreqs: P: GERMAN 2340 or equivalent

GERMAN 3320 2 credits
**German Conversation and Composition II**
This coursestressess basic German conversation as reflected in readings in the humanities (short stories, essays, social and cultural portrayals of the German world, etc.) and in real-life situations.
Components: Lecture
Prereqs/Coreqs: P: GERMAN 2340 or equivalent

GERMAN 3330 3 credits
**German Literature of the 20th Century**
Contemporary literary movements; representative works in the novel, drama and poetry; lectures and discussion in German.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: GERMAN 2340 or equivalent

GERMAN 3430 3 credits
**German Literature of the 19th Century**
Representative works from late Romanticism and Realism; special emphasis on the novelle of German as well as Austrian and Swiss authors. Lectures and discussions in German.
Components: Lecture
Prereqs/Coreqs: P: GERMAN 2340 or equivalent

GERMAN 3530 3 credits
**German Civilization**
The political, social, intellectual, artistic and literary development of the German nation from its origin to the present.
Components: Lecture
GE: Humanities

GERMAN 4220 2 credits
**Phonetics**
Theory of German sounds with practical training in pronunciation. Oral practice in language laboratory. Required for a major or teaching minor in German.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: GERMAN 2340 or equivalent

GERMAN 4250 1 - 4 credits
**Supervised Independent Study**
For advanced students who wish to acquaint themselves further with German literature, civilization or linguistics; thesis type reports and examination; by special permission-number of credits to be determined at the beginning of the course.
Components: Independent Study
Prereqs/Coreqs: P: GERMAN 2340 or equivalent

History Courses

HISTORY 1010 3 credits
**World Civilization I**
The history of mankind to 1715, with emphasis upon the interaction among the peoples of Africa, Asia and Europe.
Components: Discussion, Lecture
GE: Historical Perspective

HISTORY 1020 3 credits
**World Civilization II**
The history of mankind since 1715, with emphasis upon the interaction among the peoples of the modern world.
Components: Discussion, Lecture
GE: Historical Perspective, International Education

HISTORY 1330 3 credits
**History of the United States, 1492-1877**
A general survey of American history based on major social, political and economic developments from colonial times through the Civil War and Reconstruction.
Components: Discussion, Lecture
GE: Historical Perspective
HISTORY 1430  3 credits  
**History of the United States since 1877**  
Continuation of a general survey of American history based on major social, political and economic developments from the Reconstruction to the present.  
Components: Discussion, Lecture  
GE: Historical Perspective

HISTORY 3010  3 credits  
**Race, Gender, and United States Labor History**  
Social, cultural, and economic history of American working people from the colonial period to the present.  
Components: Laboratory, Lecture  
Cross Offerings: ETHNSTDY 3010  
GE: Ethnic Studies, Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1330 or HISTORY 1430 or consent of instructor or department chair

HISTORY 3070  3 credits  
**Latin American History**  
The development of Hispanic and Portuguese America from the pre-contact native civilizations to the present.  
Components: Lecture  
GE: Historical Perspective, International Education  
Prereqs/Coreqs: P: HISTORY 1020 or HISTORY 1430 or consent of instructor or department chair

HISTORY 3080  3 credits  
**American Military History**  
A survey of American military history with emphasis on the development of military policy and civil-military relations.  
Components: Lecture  
GE: Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1330 or HISTORY 1430 or consent of instructor or department chair

HISTORY 3120  3 credits  
**American Colonial History**  
The American Colonies, British policies and the Revolution.  
Components: Lecture  
GE: Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1330 or consent of instructor or department chair

HISTORY 3130  3 credits  
**New Nation**  
Major trends and developments in the new nation: framing the constitution, establishment of a new government, development and expansion, the Jacksonian era 1783-1848.  
Components: Lecture  
GE: Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1330 or consent of instructor or department chair

HISTORY 3140  3 credits  
**The Civil War and Reconstruction**  
The origins, manifestations and results of sectional controversy in the mid-19th century.  
Components: Lecture  
GE: Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1330 or consent of instructor or department chair

HISTORY 3150  3 credits  
**Gilded Age and Progressive Era**  
The transformation of the United States from an agrarian nation to an urban, industrial society, 1877-1917.  
Components: Lecture  
GE: Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1430 or consent of instructor or department chair

HISTORY 3230  3 credits  
**The West in American History**  
The frontier and the west from 1763-1920.  
Components: Lecture  
GE: Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1330 or HISTORY 1430 or consent of instructor or department chair

HISTORY 3240  3 credits  
**African-American History 1619 to Present**  
The historical experience of African-Americans since 1619.  
Components: Lecture  
Cross Offerings: ETHNSTDY 3240  
GE: Ethnic Studies, Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1330 or HISTORY 1430 or consent of instructor or department chair

HISTORY 3320  3 credits  
**History of Wisconsin**  
Development of the state of Wisconsin from colonial times to the present.  
Components: Lecture  
GE: Historical Perspective-2nd course only  
Prereqs/Coreqs: P: HISTORY 1430 or consent of instructor or department chair

HISTORY 3400  3 credits  
**The Vietnam War**  
Components: Lecture  
GE: Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1330 or HISTORY 1430 or consent of instructor or department chair

HISTORY 3430  3 credits  
**Twentieth Century America**  
Social, political, economic and diplomatic developments in the United States during this century.  
Components: Lecture  
GE: Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1430 or consent of instructor or department chair

HISTORY 3450  3 credits  
**History of U.S. Foreign Relations**  
An introduction to the origin and evolution of political, economic, and cultural relations between the United States and the rest of the world.  
Components: Lecture  
GE: Historical Perspective  
Prereqs/Coreqs: P: HISTORY 1330 or HISTORY 1430 or consent of instructor or department chair
HISTORY 3480 3 credits

The United States since 1945
A detailed examination of the U.S. after World War II, leading up to the present time. The course is structured around, though not limited to, these recurring subjects: the U.S. as a world power and its overseas commitments, including war; the stratification of U.S. society along racial, gender and class lines, and the sustained efforts of so many Americans to secure equality; the partisanship of U.S. policies; the links between class, capitalism, and culture.

Components: Lecture
GE: Historical Perspective
Prereqs/Coreqs: P: HISTORY 1430 or consent of instructor or department chair

HISTORY 3520 3 credits

American Women's History
Surveys the changing patterns of domestic and family life, work, education and public participation of American women from the Colonial period to the present.

Components: Lecture
Cross Offerings: WOMSTD 3520
GE: Gender Studies, Historical Perspective
Prereqs/Coreqs: P: HISTORY 1330 or HISTORY 1430 or consent of instructor or department chair

HISTORY 3610 3 credits

History of England to 1714
The major political, economic and social development in Britain from earliest times to the Glorious Revolution.

Components: Lecture
GE: Historical Perspective
Prereqs/Coreqs: P: HISTORY 1010 or consent of instructor or department chair

HISTORY 3620 3 credits

History of England since 1714
A continuation of History 3610, but may be elected as an independent unit.

Components: Lecture
GE: Historical Perspective
Prereqs/Coreqs: P: HISTORY 1020 or consent of instructor or department chair

HISTORY 3640 3 credits

Imperialism in Africa and Asia
European political and economic imperialism in Africa and Asia from the 15th century to the present.

Components: Lecture
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1020 or consent of instructor or department chair

HISTORY 3700 3 credits

Women in European Civilization
Covers actions of, and attitudes towards, women in ancient Greece and Rome, the Middle Ages, the Reformation, the Enlightenment, the French Revolution, the 19th century, and the two modern wars. Analyzes women in context of family life, work life, education, and social movements.

Components: Lecture
Cross Offerings: WOMSTD 3700
GE: Gender Studies, Historical Perspective
Prereqs/Coreqs: P: HISTORY 1010 or HISTORY 1020 or consent of instructor or department chair
HISTORY 3870 3 credits
Nazi Germany and the Holocaust
An examination of the origins and development of Nazism in Germany under the leadership of Adolf Hitler, with particular attention to the genocide against European Jewry known as the Holocaust.
Components: Lecture
GE: Historical Perspective
Prereqs/Coreqs: P: HISTORY 1020 or consent of instructor or department chair

HISTORY 3880 3 credits
Modern European Thought and Culture
An examination of the evolution of European intellectual culture from the rise of modernity in the Scientific Revolution through the Enlightenment, Romanticism, Realism, Existentialism, and Modernism to the (purported) end of modernity in Post-Modernism. Related movements such as conservatism, socialism, nationalism, feminism, and fascism will also be movements such as conservatism, socialism, nationalism, feminism, and fascism will also be covered. This course conceives of thought and culture very broadly and is primarily concerned with the social, political, and economic context of Europe's intellectual development.
Components: Lecture
GE: Historical Perspective
Prereqs/Coreqs: P: HISTORY 1010 or HISTORY 1020 or consent of instructor or department chair

HISTORY 3920 3 credits
Modern Middle East
The history of the Middle East in the 20th century.
Components: Lecture
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1020 or consent of instructor or department chair

HISTORY 3930 3 credits
East Asia
An analysis of East Asian civilizations from their origins to the present and their relations with the rest of the world.
Components: Lecture
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1010 or HISTORY 1020 or consent of instructor or department chair

HISTORY 3950 3 credits
Modern Japan
Social, cultural, and political history of Modern Japan from the 17th Century to the present.
Components: Lecture
Cross Offerings: POLISCI 3340
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1020 or consent of instructor or department chair

HISTORY 3970 3 credits
Modern China
Social, cultural, and political history of Modern China from the 19th century to the present.
Components: Lecture
Cross Offerings: POLISCI 3350
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1020 or consent of instructor or department chair

HISTORY 4110 3 credits
Russia to 1856
Political, social, economic, and cultural history of North Central Asia from the origins of human settlement until the middle of the nineteenth century, with particular attention to Russian civilization and the origin and growth of the Russian empire.
Components: Lecture
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1010 or HISTORY 1020 or consent of instructor or department chair

HISTORY 4120 3 credits
Modern Russia
Political, social, economic, and cultural history of North Central Asia from the middle of the nineteenth century until the present time, with particular attention to Russian civilization, and the political evolution from Russian empire, to Soviet partocracy, to presidential republic.
Components: Lecture
Cross Offerings: POLISCI 4120
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1010 or HISTORY 1020 or consent of instructor or department chair

HISTORY 4230 1 - 3 credits
Issues in History
Selected topics and issues of contemporary interest from world history. The specific topic will be chosen by the instructor and announced when the course is scheduled. May be repeated for credit.
Components: Lecture

HISTORY 4660 1 - 8 credits
Cooperative Field Experience
Enhancement of the educational experience through placement of a student with a cooperating agency, business or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and the department.
Components: Field Studies

HISTORY 4720 1 - 3 credits
Individual Research in History
Particularly useful for history majors who intend to do graduate work.
Components: Independent Study
Industrial Engineering Courses

INDSTENG 2130 3 credits
Fundamentals of Industrial and Systems Engineering
Introduction to industrial and systems engineering and associated specialties. Basic principles including techniques in work measurement, facility design, management, and quality. Professional ethics. Techniques are demonstrated through the use of general applications packages. (Fall, Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: sophomore standing

INDSTENG 2950 2 credits
Industrial Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science.
Components: Field Studies
Prereqs/Coreqs: P: sophomore standing

INDSTENG 2960 2 credits
Industrial Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science.
Components: Field Studies
Prereqs/Coreqs: P: sophomore standing

INDSTENG 2970 1 credit
Industrial Engineering Internship
Work experience in industry under the direction of the Cooperative Education Office of the College of Engineering, Mathematics and Science. Note: This program is separate and distinct from the Cooperative Education Program and is principally designed to cover the summer vacation period.
Components: Field Studies
Prereqs/Coreqs: P: junior standing

INDSTENG 3430 3 credits
Human Factors Engineering
Application of human factors (ergonomics) principles to the design of industrial and office systems. Consideration of human capabilities and limitations, effects of the work environment, and design for the handicapped. Application of bio-mechanical and energy consumption models, the human factors design guide, and MQPro software for virtual ergonomics analyses and evaluations. Current standards and OSHA guidelines. At least 8 laboratory projects will enhance the application of human factors principles to real world problems. Safety aspects of human factors engineering will be discussed.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: MATH 2740 and BIOLOGY 2140 or BIOLOGY 2340

INDSTENG 3530 3 credits
Operations Research I
Basic methodology and techniques of operations research; emphasis on application and problem solving models; linear programming, sensitivity analysis, nonlinear/classical optimization, queuing theory; Markov processes; dynamic programming.
Components: Lecture
Prereqs/Coreqs: P: MATH 4030 or MATH 4130

INDSTENG 3630 3 credits
Work Measurement and Design
Principles and techniques of work design, operation analysis and job design. Work methods and analysis; predetermined time systems; stopwatch time studies; work sampling; standards development. Weekly lab/project exercises allow hands-on practice with techniques. Safety and ergonomic considerations in work design will be emphasized.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: MATH 4030 and INDSTENG 3430

INDSTENG 3950 2 credits
Industrial Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science.
Components: Field Studies
Prereqs/Coreqs: P: junior standing

INDSTENG 3960 2 credits
Industrial Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science.
Components: Field Studies
Prereqs/Coreqs: P: junior standing

INDSTENG 3970 1 credit
Industrial Engineering Internship
Work experience in industry under the direction of the Cooperative Education Office of the College of Engineering, Mathematics and Science. Note: This program is separate and distinct from the Cooperative Education Program and is principally designed to cover the summer vacation period.
Components: Field Studies
Prereqs/Coreqs: P: junior standing

INDSTENG 4030 3 credits
Production and Operations Analysis
Analysis and design of production control procedures including inventory and scheduling. Operations management techniques including forecasting and aggregate planning. Project planning using CPM/PERT.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDSTENG 2130 and INDSTENG 3530

INDSTENG 4130 3 credits
System Simulation and Analysis
Applications of computer simulation of discrete systems with emphasis on model formulation; instruction in at least one simulation language. Emphasis on input data analysis, model development, model validation, statistical analysis of output, and experimental design.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDSTENG 2130 and INDSTENG 3530
INDSTENG 4230 3 credits
Facilities Design
Design principles and analytical procedures for facility location, development of an overall functional relationship plan, materials receipt accounting, processing and storage areas. Discussion of manufacturing and service-oriented facilities. Application of IE principles to optimization of site selection and facility design. Facilities covered include automated manufacturing systems, flexible manufacturing systems, modular design and office space design. Application of computerized layout techniques is emphasized. Weekly lab/project sessions allow application exercises to enhance theory.
Components: Laboratory, Lecture
Prereqs/Coreqs: C: INDSTENG 3630

INDSTENG 4330 3 credits
Material Handling and Warehousing
Procedures and techniques for analysis of material handling and warehousing problems. Principles of materials handling; systematic handling analysis; productivity analysis; unit load design; automatic identification techniques; selection/use of common and state-of-the-art equipment and techniques; design of materials handling systems; safety procedures in materials handling. Weekly lab/project sessions allow application exercises to enhance theory.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDSTENG 3530 and GENENG 2820

INDSTENG 4430 3 credits
Quality Engineering
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDSTENG 3530

INDSTENG 4630 3 credits
Manufacturing Systems Design
Principles and procedures related to the design, implementation, documentation and control of manufacturing systems. Consideration of transfer line, numerical control systems, flexible automation, robotics, and manufacturing support activities such as cost, quality, and materials control. Introduction to CAD/CAM and CIM.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: MECHNCHL 3040; C: MECHNCHL 3230

INDSTENG 4750 3 credits
Principles and Applications of Project Management
Systems perspective of scope definition, and management of scope, time human resources, communications, and risk, as it applies to industrial engineering projects.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDSTENG 4730

INDSTENG 4780 3 credits
Principles and Design of Engineering Management Information Systems
The basis of information and general systems and how they fit into an industrial engineering decision making environment. An introduction to systems analysis in relation to managing information systems for efficiency measurement, workload, staffing, and performance assessment, cost estimating, and benchmarking.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDSTENG 4730

INDSTENG 4830 3 credits
Engineering Continuous Improvement
Introduction to value engineering and lean techniques. Applications of engineering valuation. Basic principles of function analysis. Discussion of lean tools including value stream mapping.
Components: Lecture
Prereqs/Coreqs: P: INDSTENG 4730

INDSTENG 4930 3 credits
Industrial Systems Design
This is the capstone design course, the culmination of the IE program; requires knowledge and application of all the IE principles to comprehensive industrial project design and development. The project will involve the application of more than one of the following methodologies to case studies or industrial projects: facilities location and design; production planning and control; materials handling; evaluation of alternatives; economic analysis; quantitative models; cost, inventory and budgeting controls, system specifications, safety considerations.
Components: Lecture
Prereqs/Coreqs: C: INDSTENG 4230

INDSTENG 4980 1 - 3 credits
Current Topics in Engineering
In-depth study of a current topic of interest to the engineering profession. The topic will be identified in the course title.
Components: Lecture
Prereqs/Coreqs: P: senior standing

INDSTENG 4990 1 - 3 credits
Independent Study
Advanced study in the area of specialization.
Components: Independent Study
Prereqs/Coreqs: P: senior standing
Industrial Studies Courses

INDUSTDY 1030 3 credits
Introduction to Manufacturing
An introduction to manufacturing principles, systems, and operations. The relationship of manufacturing to the major technological systems (Energy/power, Communication, Construction, and Transportation) is examined. Product development/engineering design is simulated through use of 3-D software. (Fall, Spring)
Components: Laboratory, Lecture

INDUSTDY 1130 3 credits
Wood Technology
An introduction to basic woodworking processes used by industry. The design process and problem solving are emphasized through development of a portfolio. A problem is identified by the student, then solved through the construction and testing of a project. (Fall, Spring)
Components: Laboratory, Lecture

INDUSTDY 1200 3 credits
AC/DC Fundamentals
An introduction to direct and alternating current fundamentals covering electrical units, resistance, capacitance, inductance, Ohm’s Law, Kirchoff’s Law, the power formula, rectifiers, and measuring devices. (Fall, Spring)
Components: Laboratory, Lecture

INDUSTDY 1230 3 credits
Technical Drafting
An introduction to basic drafting techniques as a means of graphic communication. The principles of defining shape and size are studied utilizing computer aided drafting techniques. Activities deal with precise, applied graphic representation including precision and limit dimensioning associated with a variety of industrial situations. (Fall, Spring)
Components: Laboratory, Lecture

INDUSTDY 1260 3 credits
Building Construction Drafting
An introduction to basic drafting techniques as it pertains to building construction. The principles of defining shape and size are studied utilizing computer aided drafting techniques. Topics include sketching, projection, architectural dimensioning, sections detail views, and components of residential and commercial building structures.
Components: Laboratory, Lecture

INDUSTDY 1430 3 credits
Introduction to Metals Processes
An introductory course surveying metalworking processes. Designed to impart academic and laboratory understanding of the fundamental principles of: machining, fabrication techniques, welding, casting other metals manufacturing processes. (Fall, Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P or C: INDUSTDY 1030 or AGIN 1750

INDUSTDY 1530 3 credits
Power Systems Technology
An analysis of methods of transferring industrial power. The basic principles of applied mechanisms, electrical actuators, control systems, engines and introductory pneumatics and hydraulics are emphasized in the course. (Fall, Spring)
Components: Laboratory, Lecture

INDUSTDY 1830 3 credits
Synthetic and Composite Materials
An introductory course to industrial materials including plastics, metallics, and ceramics and their limitations. The rationalization of enhancement of properties by combining the traditional industrial materials and applications of composite materials. This course is lab and lecture and the lab activities are emphasizing the spectrum of plastic matrix composite, testing, and evaluation of materials. (Fall, Spring)
Components: Laboratory, Lecture

INDUSTDY 2260 3 credits
Semiconductors
Discrete electronic device circuits will be investigated including power supplies, transistor amplifiers, and switching and control circuits. The course will also include an introduction of integrated circuit devices and operational amplifiers and their applications. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1200 and INDUSTDY 1530

INDUSTDY 2430 3 credits
Construction Materials and Graphics
A detailed drafting/materials course utilizing conventional and CADD related to the study of soils, classification, and earthwork; cement, concrete, and concrete forming; grades, sizes, and application of lumber and plywood and framing details and structural calculations as related to residential and commercial building construction. (Fall, Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1260

INDUSTDY 2540 3 credits
Materials and Techniques of Building Construction
A conventional/CADD architectural drafting course related to the fundamental study of architectural perspectives, including shades and shadows; materials and methods associated with interior and exterior floor, wall, and ceiling construction; and the basics of construction surveying and land description. (Fall, Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 2430 and COMPUTER 1830

INDUSTDY 2710 3 credits
Principles of Safety
A study of the principles of industrial safety. The course includes basic industrial safety concepts, analyzing safety and health issues at the workplace, accident causation, and prevention theories. Emphasis is placed on identifying and correcting unsafe practices or conditions before accidents occur. OSHA standards are also covered in the course. (Fall, Spring)
Components: Lecture
INDUSTDY 2910 3 credits
Plastics Technology
The history, material chemistry, safety, properties, and testing are discussed. Plastic parts design is introduced. Plastics processing techniques, including the seven common plastics processing techniques and other specialized production methods are demonstrated. (Spring)
  Components: Laboratory, Lecture
  Prereqs/Coreqs: P: INDUSTDY 1830

INDUSTDY 3140 4 credits
General Construction Estimating
Principles, theories, and systems of general construction estimating; quantity survey techniques; standard forms; material costs and labor pricing; and the use of computer estimating software. (Spring)
  Components: Laboratory, Lecture
  Prereqs/Coreqs: P: INDUSTDY 2430 and COMPUTER 1830

INDUSTDY 3150 3 credits
Polymeric and Ceramic Materials
An analytical course that introduces students to the science and chemistry of polymeric and ceramic materials. The course is divided into two parts: Part I contains the fundamentals of atomic bonding, crystalline structures, phase diagrams, kinetics, and effects; Part II discusses the properties, design considerations, and applications of these industrial materials. (Fall)
  Components: Laboratory, Lecture
  Prereqs/Coreqs: P: INDUSTDY 1830

INDUSTDY 3160 3 credits
Machining and CNC Programming
An intermediate course combining academic and laboratory principles of machining, Computer Numerical Control (CNC), computer assisted part programming, and CAD/CAM. Several laboratory projects develop knowledge and familiarity with machining centers and turning centers. (Spring)
  Components: Laboratory, Lecture
  Prereqs/Coreqs: P: INDUSTDY 1030 and INDUSTDY 1430

INDUSTDY 3180 3 credits
Construction Safety Management
A practical study of construction safety management principles and concepts are covered in this course designed for Building Construction Management majors or minors and Occupational Safety Management majors or minors. The course includes various management strategies for the identification, evaluation and control of unsafe behaviors in effort to reduce injuries, fatalities and accidents on the construction site. Emphasis is also placed on the understanding of selected Code of Federal Regulations # 1926 OSHA Construction Industry Standards utilized in the development of a safe and healthy working environment. (Spring)
  Components: Lecture

INDUSTDY 3210 3 credits
Construction Laboratory
Laboratory and field experience in basic carpentry and masonry principles, concrete forming, brick and block laying, estimating, scheduling and related areas. (Fall)
  Components: Laboratory, Lecture
  Prereqs/Coreqs: P: INDUSTDY 1130 and 2430

INDUSTDY 3220 3 credits
Construction Procedures
Planning and analysis of work methods, scheduling and its computer applications, control of crews, materials and equipment selection, CPM and PERT methods of scheduling, contract types, the project manual concept, and construction specification writing and interpretation. (Spring)
  Components: Lecture
  Prereqs/Coreqs: P: INDUSTDY 2430 and MATH 1830 and COMPUTER 1830

INDUSTDY 3230 3 credits
Digital Electronics
The study of digital and linear integrated circuits utilized in control systems applications. Timer circuits, logic gates, and programmable memory will be used in applications Microcontroller programming and applications will be emphasized. (Fall)
  Components: Laboratory, Lecture
  Prereqs/Coreqs: P: INDUSTDY 1200 and INDUSTDY 1530

INDUSTDY 3310 3 credits
Metallurgy and Joining Processes
An intermediate course studying the physical and mechanical properties of metals and their alloys, and the principles of heat treatment of ferrous and non ferrous alloys. Laboratory and theory on welding and joining processes and their affects on the metallurgy and physical properties of metals. A semester project on metallurgy or a joining method with a final report and presentation are requirements of the course. (Check with Department for rotation.)
  Components: Laboratory, Lecture
  Prereqs/Coreqs: P: INDUSTDY 1030 and INDUSTDY 1430

INDUSTDY 3460 3 credits
3D Industrial Production Drafting
Expands 2D drafting concepts using AutoCAD and provides integration of drafting and design procedures with three-dimensional software. Students will explore introductory through intermediate techniques including part model creation, assemble model creation, part drawing documents, geometric dimensioning and tolerancing, and other modeling features related to 3-D solid modeling. Students will apply drafting and design principles to component parts toward various applications to meet industry standards. (Fall, Spring)
  Components: Laboratory, Lecture
INDUSTDY 3480 3 credits

**Metalcasting Technology I**

Technical study and laboratory investigation into processes used in the manufacture of non-ferrous metalcastings. Special emphasis on the following processes: green sand molding and testing, evaporative pattern casting, investment casting, chemically bonded sand, and shell sand. Also, lecture and discussions on the following topics: gating practices, sand technology, coremaking, casting defects, pattern development, metallurgy of aluminum and light alloys, metallurgy of copper base alloys, and cast trends in the metalcasting industry. (Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1030 and INDUSTDY 1430

INDUSTDY 3550 3 credits

**Fluid Power and Servo Systems**

The study of fluid power theory and their applications to industrial processes. The course includes the examination of fluids, pumps, compressors, conditioners, control devices, actuators, symbols, and circuitry. Other course areas include an introduction to electrical, electronics, and fluid servo systems. (Fall)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1530

INDUSTDY 3560 3 credits

**Industrial Control Systems**

The course includes the principles of measurement and control fundamentals including relay control systems, ladder logic, programmable controllers, industrial sensors, control software, and computer-controller systems. (Fall)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1200 and INDUSTDY 1530

INDUSTDY 3590 3 credits

**Industrial Hygiene Technology**

Course is concerned with the chemical and physical hazards that impair the health of workers while on the job. Emphasis in the course is in recognizing, evaluating, and controlling hazards. Students receive experience in monitoring exposure of workers to harmful hazards and harmful physical conditions. (Every third semester.)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 2710

INDUSTDY 3610 3 credits

**Safety and Worker Compensation Laws**

A study of the function of federal, state, and local laws in occupational safety. Emphasis is placed on OSHA and worker compensation legislation. The course reviews current requirements and court decisions as they relate to injury, accidents, and occupational disease. An opportunity is provided to evaluate various standards as each applies to educational and industrial facilities. (Every third semester)

Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 2710

INDUSTDY 3730 3 credits

**Three-Dimensional CADD**

A study of the principles and techniques used to illustrate three-dimensional forms. Traditional techniques and CADD are employed to construct wire-frame, surface and solid models. (Fall)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1230 or (GENENG 1020 or GENENG 1030 and GENENG 1320)

INDUSTDY 3810 3 credits

**Alcohol and Other Drugs as Related to Safety**

A study of drug and alcohol use and abuse related to safety is included in the curriculum. The effects of drug and alcohol use and abuse and their influences on the American Society are provided. Responsible drinking and driving issues are also covered. In addition, strategies to deal with the troubled employee at the workplace are included. Emphasis is placed on discussion. A university or community service learning opportunity is also provided. (Every third semester)

Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 2710

INDUSTDY 3930 3 credits

**Teaching Technology Education**

Teaching methodology, delivery styles, and curriculum development for technology education. Unit planning, lesson planning, and aligning curriculum to standards are emphasized in an interactive teaching/learning environment. (Fall)

Components: Lecture
Prereqs/Coreqs: P: TEACHING 1230

INDUSTDY 3940 3 credits

**Materials Testing and Evaluation**

A technical study and evaluation of industrial materials and processes using destructive and nondestructive evaluation methods. The course is designed to increase breadth and depth of knowledge of differing material characteristics and properties. Emphasis is given to understanding and application of processes used in material selection and testing methods. (Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1030 or INDUSTDY 1430 and INDUSTDY 1830

INDUSTDY 3950 3 credits

**Industrial Design for Production**

Study of design principles, production methods, and simultaneous manufacturing techniques. Emphasis is on understanding and application of the design process. Laboratory activities focus on the design and production of a product. (Fall)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1030 and INDUSTDY 1230

INDUSTDY 4020 1 - 3 credits

**Topics in Industrial Studies**

The study of selected topics common to the industrially oriented disciplines. The topic to be covered will be identified in the course title. (Fall, Spring)

Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 1230 or INDUSTDY 1200 or INDUSTDY 2710
INDUSTDY 4030  3 credits  
**Electrical Power**  
A study of the methods and systems of AC and DC power generation, distribution, and motors. Other course areas include motor controllers, mechanical switches, and other industrial control systems. (Spring)  
Components: Lecture  
Prereqs/Coreqs: P: INDUSTDY 1200

INDUSTDY 4130  3 credits  
**Industrial Laser Application**  
An investigation of principles and applications of lasers and laser systems as they pertain to manufacturing, service, and communication industries. The use of lasers in industrial, medical, and military applications will be discussed. Emphasis will be given to industrial applications such as cutting, welding, and heat treating. (Spring)  
Components: Laboratory, Lecture  
Prereqs/Coreqs: P: INDUSTDY 1430 and INDUSTDY 1830

INDUSTDY 4160  3 credits  
**Metal Manufacturing Senior Design**  
Application of the principles of design, metal cutting theory, CNC programming, metalcasting, and other metals manufacturing methods. In order to complete the semester project students will also apply production tooling methods, cost and time estimating, and quality measurement. An in depth final report and presentation are required. (Fall)  
Components: Laboratory, Lecture  
Prereqs/Coreqs: P: INDUSTDY 1430 and INDUSTDY 3160 and INDUSTDY 3460

INDUSTDY 4360  3 credits  
**Specialized Drafting Practices**  
This course provides an integration of 3-D drafting practices as they are applied to technical drafting problems. Conventional and computer aided drafting and design procedures will be applied to auxiliary and sectional views, geometric dimensioning and tolerancing, gears, cams, fixture layout, applied mechanics, and special fields of drafting to create assembly drawings for production. (Fall)  
Components: Laboratory, Lecture  
Prereqs/Coreqs: P: INDUSTDY 1030 and INDUSTDY 1230

INDUSTDY 4480  3 credits  
**Industrial Robotics**  
Study and application of robotic systems to include: fundamentals, classification, integration in manufacturing systems, end-effectors, sensors, vision systems, auxiliary equipment and control systems, safety and cost justification. Basics of robot programming is applied. (Fall)  
Components: Laboratory, Lecture  
Prereqs/Coreqs: P: INDUSTDY 1530

INDUSTDY 4490  3 credits  
**Metalcasting Technology II**  
In depth course in cast iron metallurgy and ferrous foundry practice. A semester project is chosen and followed through to completion. To complete the project many skills will be taught: melting practice and furnace operation, calculation of the risering and gating system, verification using computer modeling, patternmaking, molding, and pouring. Metallurgical analysis of the project produced is also necessary and a final report and presentation will be made. (Fall)  
Components: Laboratory, Lecture  
Prereqs/Coreqs: P: INDUSTDY 1030 and INDUSTDY 1430 and INDUSTDY 3310 and INDUSTDY 3480

INDUSTDY 4530  3 credits  
**Residential Planning and Design**  
Residential planning, design and construction; specific emphasis is placed on the presentation plans, home ownership, housing, design requirement, and special structural design considerations. Laboratory work consists of developing a complete set of working architectural plans and related specifications using conventional and CADD drafting practices. (Spring)  
Components: Laboratory, Lecture  
Prereqs/Coreqs: P: INDUSTDY 2430

INDUSTDY 4630  3 credits  
**Building Systems Analysis**  
The major building systems which include electrical systems, climate controlling systems, lighting systems, and water supply and drainage systems are studied. (Spring)  
Components: Laboratory, Lecture  
Prereqs/Coreqs: P: INDUSTDY 2430 and COMPUTER 1830

INDUSTDY 4640  3 credits  
**Curriculum and Facility Planning**  
Curriculum development through design of a program of study. Procedures for identifying and organizing content are examined. Laboratory design and layout are correlated with curriculum through examination of building codes, safety requirements, and equipment specifications. (Spring)  
Components: Lecture  
Prereqs/Coreqs: P: TEACHING 1230

INDUSTDY 4720  3 credits  
**Seminar in Safety**  
Programs in safety are explored with safety resource experts from industry, education, and government agencies invited as speakers. Additional time is devoted to topics to prepare the safety student for the safety profession. Included would be such topics on how to develop resumes, employment opportunities in the safety profession, and certification available in the safety profession. (Every third semester)  
Components: Seminar  
Prereqs/Coreqs: P: INDUSTDY 2710 and junior standing

INDUSTDY 4750  3 credits  
**Disaster Preparedness**  
Principles of organization on the local, state, and national levels concerning natural and human disasters. A systematic and realistic approach to hazard analysis and mitigation. An opportunity is provided to participate in a class disaster preparedness project. (Every third semester)  
Components: Lecture  
Prereqs/Coreqs: P: INDUSTDY 2710
INDUSTDY 4770 3 credits
Loss Control Safety Management
The role of management involved with principles of organization, implementation, administration, and evaluation of occupational safety programs is provided in the course. Methods of controlling losses, basic risk management theories, behavioral-based safety concepts and others are studied. Emphasis is placed on accountability and measuring safety performance at all levels of industry. (Every third semester)
Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 2710

INDUSTDY 4780 3 credits
Ergonomics in the Workplace
Ergonomics is the study of fitting jobs to workers and doing whatever is necessary to improve worker comfort. Topics covered in this course include: identifying ergonomic problems, office ergonomics, biomechanical principles, determining physical stress on the job, back problems, flexibility exercises. NIOSH lifting standard and equation, cumulative trauma disorders, ergonomic job hazard analysis, work station design cost, and others. An opportunity is provided to conduct an ergonomic job hazard analysis. (Spring)
Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 2710

INDUSTDY 4790 3 credits
Safety Management Components
The course stresses the importance of communications to the safety professional. Areas of communication studied include setting up and conducting safety conferences and developing a safety manual. The opportunity to develop a safety program is provided. Other safety-related communication techniques are also covered. (Every third semester)
Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 2710

INDUSTDY 4810 3 credits
Fire Protection
A study of the nature and theory of fire hazards; preplanning to prevent fires; the systems approach to fire protection services; the technology of fire control; and the application of theory and technology to solving fire problems. Special attention is given to preparing comprehensive fire prevention programs in the business or industrial world. (Every third semester)
Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 2710

INDUSTDY 4820 2 credits
Principles of Vocational-Technical Education
An examination of the historical roots of vocational-technical education. Readings and research are conducted on the current trends and issues facing vocational-technical education in a high tech society. Satisfies Vocational Certification. (Winterim and every other Spring)
Components: Lecture
Prereqs/Coreqs: P: TEACHING 1230

INDUSTDY 4840 3 credits
Construction Administration
Construction company organization; contract documents; legal, ethical, business, and management procedures; and principles of construction management. (Fall)
Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 2430

INDUSTDY 4850 3 credits
Thermoforming Technology
The course is an investigation of science and technology of Thermoforming as a common method of production of plastic packaging and articles. The description of technology and machinery will be discussed. Emphasis will be given to part and mold design, use of CAD-CAM and simulation packages such as T-Sim. Students will have hands-on opportunity of working with mold design and mold production, machine operation, process trouble shooting, process optimization and quality evaluation. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 2910

INDUSTDY 4860 3 credits
Injection Molding Technology
The course is an investigation of science and technology of injection molding as a common method of production of plastic articles. The description of the technology and machinery will be discussed. Emphasis will be given to part and mold design, use of CAD-CAM and simulation packages such as Mold-Flow. Students will have hands-on opportunities of working with mold preparation, machine operation, process trouble shooting and quality evaluation. (Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 2910

INDUSTDY 4870 3 credits
Extrusion Technology
A course designed to provide students with in-depth knowledge of design, evaluation, and processing technique as they pertain to the plastics extrusion industry. The course emphasizes process description, profile design, die production, process and cost evaluation. The students will learn theoretical knowledge of extrusion and extrusion processes, production and troubleshooting of this production technique.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1830 and INDUSTDY 2910

INDUSTDY 4900 3 credits
Work Measurement and Human Factors
A study of methods to improve productivity, efficiency and effectiveness of work methods. This course is intended to provide an understanding of the principles of motion economy and work measurement techniques using graphing and charting tools, process picture mapping, 5 S’s value stream mapping, quantitative analysis methods, lean manufacturing and six sigma concepts. The course is designed for those responsible for supervising or conducting work measurement in industry, but is also valuable for any business or service organization. (Fall, Spring)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1030 and MATH 1830

251
INDUSTDY 4940 3 credits

Quality Assurance
The study of techniques and procedures of assuring and maintaining the quality of industrial products and services. Statistical process control methods such as variable and attribute control charts, acceptance sampling, process capability and reliability are examined. The course also studies modern quality systems, Six Sigma, industrial experimentation and ISO standards. (Fall, Spring)

Components: Laboratory, Lecture
Prereqs/Coreqs: P: INDUSTDY 1030 and MATH 1830

INDUSTDY 4950 3 credits

Production Planning and Control
An investigation and study of the current approach of effective management practices associated with production planning, scheduling, and control. Operations strategy, quality of work life, global competition, lean manufacturing, forecasting methods, supply chain management practices, scheduling and plant facilities layout are stressed. (Fall, Spring)

Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 1030

INDUSTDY 4960 3 credits

Commercial Building Planning and Construction Techniques
Specific emphasis is placed on planning/materials/methods and construction practices associated with general building construction including people/buildings/cities, land planning, infrastructure, equipment/machines, codes, pre-engineered buildings, and innovative technologies. (Fall)

Components: Lecture
Prereqs/Coreqs: P: INDUSTDY 2430

INDUSTDY 4970 1 - 3 credits

Independent Study in the Department of Industrial Studies
Independent study is a contractual learning experience resulting in a technical report, research paper, project, or a combination of these. Selection of the area of study is done by the student in consultation with the instructor. (Fall, Spring)

Components: Independent Study
Prereqs/Coreqs: P: INDUSTDY 1200 and INDUSTDY 1230 and INDUSTDY 2710 and junior standing

INDUSTDY 4980 3 credits

Training and Supervision
An investigation of the duties and responsibilities of first-line supervisors. Emphasis is given to worker motivation, effective communication with employees, recruiting and selecting employees, supervisory leadership, employee evaluation and discipline, special interests in the workplace, employee training needs, and industrial training programs. (Fall, Spring)

Components: Lecture
Prereqs/Coreqs: P: junior standing and 18 credits in industrial studies

INDUSTDY 4990 1 - 8 credits

Industrial Studies Internship
An on-the-job assignment commensurate with the instruction program and approved by the industrial internship coordinator. May be repeated for up to 8 credits, but must be progressively more advanced. (Fall, Spring, Summer)

Components: Field Studies
Prereqs/Coreqs: P: junior standing, 18 credits in industrial studies and other requirements per the Industrial Studies Internship Handbook

Mathematics Courses

MATH 10 3 credits

Elementary Algebra
This course is a comprehensive study of the topics generally found in a first year high school algebra course, and provides a foundation for success in required college mathematics courses. (This course is required for students with a mathematics proficiency level of 00. This course does not carry UWP degree credit.) (Fall, Spring)

Components: Lecture

MATH 15 3 credits

Intermediate Algebra
Fundamental operations, factoring, fractions, equations, functions, graphing, exponents and radicals, linear equations, systems of equations, inequalities, polynomials, rational expressions, and quadratics. (This course does not carry UWP degree credit.) (Fall, Spring, Summer)

Components: Lecture
Prereqs/Coreqs: P: MATH 10 with a “C” or better or mathematics proficiency level of 10 or above

MATH 1030 3 credits

Mathematics for Educators I
Math 1030 is the first semester in a three-semester sequence of integrated content and methods courses for pre-service teachers. It is open only to students in elementary education pursuing certification levels B-11 or 10-14. (The course is not intended for students pursuing certification level 10-21.) Topics covered include problem solving, formal and informal argument, history and development of number systems, sets, fundamental operations with whole numbers and integers, foundational work with functions, and selected topics from statistics. (Fall, Spring)

Components: Exam, Lecture
Prereqs/Coreqs: P: MATH 15 with a grade of “C” or better or mathematics proficiency level of 15 or above. (Open only to Elementary Education majors)

MATH 1530 3 credits

College Algebra
Equations and inequalities, functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, complex numbers, systems of equations. This course is equivalent to the first half of Math 2450. Students will not receive credit for both Math 1530 and Math 2450. (Fall, Spring, Summer)

Components: Lecture
Prereqs/Coreqs: P: MATH 15 with a grade of “C” or better or mathematics proficiency level of 15 or above. (MATH 1530 and MATH 2530 may not be taken concurrently)
MATH 1630 3 credits

**Finite Mathematics with Applications**
Set theory, coordinate systems and graphs, matrices, linear systems, linear programming (geometric and simplex), probability, Markov Processes; with applications in the fields of business and economics. (Fall)

Components: Lecture
GE: Math
Prereqs/Coreqs: P: MATH 15 or MATH 1530 or mathematics proficiency level of 15 or above

MATH 1730 3 credits

**Mathematics of Finance**
Simple and compound interest, annuities, amortization, depreciation, valuation of securities, and bonds. (Fall, Spring, Summer)

Components: Lecture
GE: Math
Prereqs/Coreqs: P: MATH 15 or MATH 1530 or mathematics proficiency level of 15 or above

MATH 1830 3 credits

**Elementary Statistics**
An introduction to statistical analytical methods including graphing distributions, numerical summaries, linear regression and correlation, the normal distribution, confidence intervals and hypothesis tests for means and proportions, analyzing two-way tables, and analysis of variance. Minitab will be used throughout the course. (Fall, Spring, Summer)

Components: Exam, Lecture
GE: Math
Prereqs/Coreqs: P: MATH 15 or MATH 1530 or mathematics proficiency level of 15 or above

MATH 2030 3 credits

**Mathematics for Educators II**
Math 2030 is the second semester in a three-semester sequence of integrated content and methods courses for preservice teachers. It is open only to students in elementary education pursuing certification levels B-11 or 10-14. (The course is not intended for students pursuing certification level 10-21.) Topics covered include number theory; composition and decomposition of numbers including primes, factors, and multiples; using physical models to develop concepts of and operations on rational numbers; proportional reasoning; and number sense. (Fall, Spring)

Components: Exam, Lecture
GE: Math (Elem/Mdl Educ Only)
Prereqs/Coreqs: P: MATH 1030 with a grade of “C” or better. (Open only to Elementary Education majors)

MATH 2450 5 credits

**Precalculus**
Solving equations and inequalities, functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometric and inverse trigonometric functions, trigonometric identities and formulas, complex numbers, systems of equations, and conic sections. This course is equivalent to taking both Math 1530 and Math 2530. Students who have credit for Math 1530 or Math 2530 should not take Math 2450. (Fall, Spring, Summer)

Components: Lecture
GE: Math
Prereqs/Coreqs: P: MATH 15 with a grade of “B” or better or mathematics proficiency level of 20 or above

MATH 2530 3 credits

**Trigonometry and Analytic Geometry**
Functions and their graphs, trigonometric and inverse trigonometric functions, trigonometric identities and formulas, solution of triangles, complex numbers, exponential and logarithmic functions, and conic sections. This course is equivalent to the second half of Math 2450. Students will not receive credit for both Math 2450 and Math 2530. (Fall, Spring, Summer)

Components: Lecture
GE: Math
Prereqs/Coreqs: P: MATH 1530 with a grade of “C” or better or mathematics proficiency level of 30 or above

MATH 2630 3 credits

**Calculus with Applications**
Functions, limits, rates of change, exponential and logarithmic functions, differentiation, integration; with applications in the fields of business and economics. (Spring)

Components: Lecture
GE: Math
Prereqs/Coreqs: P: MATH 1530 or MATH 1630 or MATH 2450 or mathematics proficiency level of 30 or above

MATH 2640 4 credits

**Calculus and Analytic Geometry I**
Limits and continuity, differentiation, differentials, antiderivatives, the definite integral and applications. (Fall, Spring, Summer)

Components: Exam, Lecture
GE: Math
Prereqs/Coreqs: P: MATH 2450 or MATH 2530 with a grade of “C” or better, or mathematics proficiency level of 40

MATH 2730 3 credits

**Discrete Mathematics**
Logic, sets, combinations, relations, networks and algebraic structures. (Fall, Spring)

Components: Lecture
Prereqs/Coreqs: P: MATH 2450 or MATH 2530 or MATH 2630 or MATH 2640 with a grade of “C” or better, or mathematics proficiency level of 40
MATH 2740  
4 credits
Calculus and Analytic Geometry II
Derivatives and integrals involving exponential, logarithmic, and inverse trigonometric functions, further study of limits, further techniques and applications of integration, sequences and series, polar coordinates, and parametric equations. (Fall, Spring, Summer)
  Components: Exam, Lecture
  Prereqs/Coreqs: P: MATH 2640 with a grade of “C” or better or advanced placement

MATH 2840  
4 credits
Calculus and Analytic Geometry III
Analytic geometry of three dimensions, vector analysis, partial differentiation, multiple integrals, and line integrals. (Fall, Spring, Summer)
  Components: Exam, Lecture
  Prereqs/Coreqs: P: MATH 2740 with a grade of “C” or better or advanced placement

MATH 3020  
3 credits
Teaching of Mathematics in the Middle and Secondary School
An analysis of the mathematics studied in the middle and secondary schools. Topics include the principles and standards implemented by the NCTM for teaching mathematics and the methods and materials used in educating students in mathematics. (Fall)
  Components: Lecture
  Prereqs/Coreqs: P: MATH 2740 and junior standing and admission to the School of Education

MATH 3030  
3 credits
Mathematics for Educators III
Math 3030 is the third semester in a three-semester sequence of integrated content and methods courses for preservice teachers. It is open only to students in elementary education pursuing certification levels B-11 or 10-14. (The course is not intended for students pursuing certification level 10-21). Topics covered include names, properties, and relationships of two- and three-dimensional shapes; spatial sense; transformations including rotations, reflections, and translations; coordinate geometry; concepts of measurement including measurable attributes, standard and non-standard units, precision and accuracy, use of appropriate tools, the structure of systems of measurement; measurement including length, area, volume, size of angles, weight, mass, and temperature; indirect measurement and its uses, including developing formulas; formal and informal argument. (Fall, Spring)
  Components: Exam, Lecture
  Prereqs/Coreqs: P: MATH 2030 with a grade of “C” or better. (Open only to elementary education majors)

MATH 3040  
4 credits
Mathematics Seminar for Middle School Teachers
This course is intended to provide a background for teaching algebra and geometry in the middle school. This course will emphasize problem solving, communication, reasoning, representations, and making connections. Through problem-solving activities lead by either the instructor or students, the course will emphasize specific topics such as proportional reasoning, pattern finding, generalizing functional relationships, solving equations, area, perimeter, and volume. In particular, the course will emphasize the links between algebra and geometry, and when appropriate, will use relevant manipulatives including technology. The course will also emphasize pedagogical implications of current research regarding the teaching and learning of algebra and geometry. (Spring)
  Components: Lecture
  Prereqs/Coreqs: P: MATH 3030 with a grade of “C” or better. (Open only to students in the early adolescent education program)

MATH 3130  
3 credits
College Geometry
Topics from Euclidean geometry including classical theorems, transformational geometry, and Euclidean constructions. Non-Euclidean topics include inversion and reciprocation, as well as some ideas from projective geometry. A dynamic geometry software program is used extensively to illustrate ideas in this course. (Spring)
  Components: Lecture
  Prereqs/Coreqs: P: MATH 2640 and junior standing

MATH 3230  
3 credits
Linear Algebra
Matrices, systems of equations, determinants, eigenvalues, eigenvectors, vector spaces, linear transformations, and diagonalization. This class is intended to introduce students to formal mathematics. Students will be expected to write definitions, theorems, and proofs. (Fall, Spring, Summer)
  Components: Exam, Lecture
  Prereqs/Coreqs: P: MATH 2740 with a grade of “C” or better

MATH 3330  
3 credits
Modern Algebra
Study of the structure of abstract algebraic systems through formal proof. Deals primarily with groups, but also examines other algebraic systems including rings and fields. (Spring)
  Components: Lecture
  Prereqs/Coreqs: P: MATH 3230 with a grade of “C” or better

MATH 3330  
3 credits
Modern Algebra
Study of the structure of abstract algebraic systems through formal proof. Deals primarily with groups, but also examines other algebraic systems including rings and fields. (Spring)
  Components: Lecture
  Prereqs/Coreqs: P: MATH 3230 with a grade of “C” or better

MATH 3630  
3 credits
Differential Equations I
Solutions of first order differential equations, linear homogeneous and nonhomogeneous differential equations, Laplace transforms, linear systems and applications. (Fall, Spring, Summer)
  Components: Exam, Lecture
  Prereqs/Coreqs: P: MATH 2840 with a grade of “C” or better
MATH 3730 3 credits

**Numerical Analysis**
This course is intended to provide an introduction to numerical methods. Topics will include computer arithmetic, solving nonlinear equations, numerical linear algebra, interpolation and curve fitting, numerical calculus, and numerical solutions of ordinary differential equations. Other topics may be added as time permits. (Spring odd years.)
Components: Lecture
Prereqs/Coreqs: P: MATH 3230 and fluency in a programming language

MATH 3830 3 credits

**Differential Equations II**
Linear systems of differential equations, nonlinear systems, series solutions of differential equations, partial differential equations, orthogonal sets, and Fourier series. (Spring)
Components: Lecture
Prereqs/Coreqs: P: MATH 3630 with a grade of “C” or better

MATH 4030 3 credits

**Statistical Methods with Applications**
Introduction to probability, density and distribution functions, special discrete and continuous distributions, estimation, hypothesis testing, chi-square, correlation and regression. (Fall, Spring, Summer)
Components: Exam, Lecture
Prereqs/Coreqs: P: MATH 2740 with a grade of “C” or better

MATH 4040 3 credits

**Statistics and Probability**
A thorough investigation of more advanced applications in statistics including joint distributions, linear regression, multiple regression, design of experiments for a single factor and multiple factors, analysis of variance, nonparametric statistics, and statistical quality control. (Fall)
Components: Lecture
Prereqs/Coreqs: P: MATH 4030 with a grade of “C” or better

MATH 4320 3 credits

**History and Development of Mathematical Concepts**
A study of the history and development of mathematics from the primitive origins of numbers to modern mathematics. (Fall odd years.)
Components: Lecture
Prereqs/Coreqs: P: MATH 2640 and junior standing

MATH 4330 3 credits

**Theory of Numbers**
Integers, divisibility, prime numbers, Euclidean algorithm, linear Diophantine equations, congruences, Wilson’s and Euler’s theorems, Fermat’s little theorem, and other selected topics. (Fall even years.)
Components: Lecture
Prereqs/Coreqs: P: MATH 2640 and junior standing

MATH 4430 3 credits

**Advanced Calculus**
Study, through formal proof, of sequences, limits, continuity, differentiation, integration, infinite series, and uniform convergence. (Fall)
Components: Lecture
Prereqs/Coreqs: P: MATH 2840 with a grade of “C” or better

MATH 4530 3 credits

**Complex Variables**
Complex numbers, complex functions, differentiation, elementary functions, integration, and infinite series. (Spring even years.)
Components: Lecture
Prereqs/Coreqs: P: MATH 2840 with a grade of “C” or better

MATH 4660 1 - 8 credits

**Cooperative Field Experience**
Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the assignment, type of experience, number of credits, and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and department.
Components: Field Studies

MATH 4810 1 credit

**Senior Seminar**
Development of library research techniques, organization and presentation of research findings beyond those formed in existing courses. (Fall, Spring)
Components: Seminar
Prereqs/Coreqs: P: 12 credits of mathematics selected from MATH 3100 and above

MATH 4920 1 - 3 credits

**Independent Study in Mathematics**
Components: Independent Study

---

**Mechanical Engineering Courses**

MECHNCHL 2630 3 credits

**Thermodynamics**
Basic concepts and definitions, properties of ideal gases and real substances. Conservation of mass. First law of thermodynamics for closed and open systems. Second law of thermodynamics, entropy, and availability. (Fall, Spring, Summer)
Components: Lecture
Prereqs/Coreqs: P: CHEMISTRY 1450 or 1240 and PHYSICS 2530 or 2240; C: MATH 2840

MECHNCHL 2950 2 credits

**Mechanical Engineering Cooperative Education**
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics and Science.
Components: Field Studies
Prereqs/Coreqs: P: sophomore standing

MECHNCHL 2960 2 credits

**Mechanical Engineering Cooperative Education**
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics, and Science.
Components: Field Studies
Prereqs/Coreqs: P: sophomore standing
Mechanical Engineering Internship
Work experience in industry under the direction of the Cooperative Education Office of the College of Engineering, Mathematics, and Science. Note: This program is separate and distinct from the Cooperative Education Program and covers summer work experience.
Components: Field Studies

Mechanical Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics, and Science.
Components: Field Studies
Prereqs/Coreqs: P: junior standing (Note: credits do not fulfill any graduation requirements)
MECHNCHL 3960 2 credits
Mechanical Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the College of Engineering, Mathematics, and Science.
Components: Field Studies
Prereqs/Coreqs: P: junior standing (Note: credits do not fulfill any graduation requirements)

MECHNCHL 3970 1 credit
Mechanical Engineering Internship
Work experience in industry under the direction of the Cooperative Education Office of the College of Engineering, Mathematics, and Science. Note: This program is separate and distinct from the Cooperative Education Program and is principally designed to cover the summer vacation.
Components: Field Studies

MECHNCHL 4310 1 credit
Controls Laboratory
Laboratory projects applying the theoretical principles from MECHNCHL 4320 or ELECTENG 3310 to the control of electromechanical systems. (Fall, Spring)
Components: Laboratory
Cross Offerings: ELECTENG 3300
Prereqs/Coreqs: C: ELECTENG 3310 or MECHNCHL 4320

MECHNCHL 4320 2 credits
Automatic Controls
The design and analysis of feedback control systems using root locus, frequency response, and state space methods. The specification, analysis, and compensation of feedback systems. (Fall, Spring)
Components: Lecture
Prereqs/Coreqs: P: MECHNCHL 3030 and GENENG 2930; C: MECHNCHL 4310

MECHNCHL 4430 3 credits
Advanced Materials
Components: Laboratory, Lecture
Prereqs/Coreqs: P: MECHNCHL 3040

MECHNCHL 4440 3 credits
Failure of Materials
Fatigue and fracture of materials are covered. Included are stress-life and strain-life analysis, fracture mechanics, stress concentration influences and variable amplitude loading. The design component of the course is done using CAD, FEA simulation, and fatigue life prediction software. Using commercially available software gives the students experience designing realistic components subjected to variable fluctuating load histories. Mechanical testing principles and principles for recognition of fatigue failure from fracture surfaces are also introduced in the course.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: MECHNCHL 3040

MECHNCHL 4500 3 credits
Biomedical Engineering
An overview of the human physical system as a context for engineering design. Introduction to the functional basis of physiologic systems. Instrumentation, biomechanics, and design of medical devices. Principles of accessibility, and universal design.
Components: Discussion, Lecture
Prereqs/Coreqs: P: senior standing in engineering or consent of instructor

MECHNCHL 4520 3 credits
Power Plant Design
Analysis and design of steam power systems. Combustion turbines. Renewable energy. Environmental aspects and economics of power generation. Recent developments, future trends, and societal issues in power industry.
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: MECHNCHL 3630

MECHNCHL 4550 3 credits
Heat Transfer Applications
Review of conduction, convection, and radiation heat transfer. Extension to variable properties and more complex geometrics. Current heat transfer problems and applications such as electronic cooling, heat pipes, capillary pumped loops, and cryogenic heat transfer. Survey of currently used correlations and numerical techniques. Application of the current state-of-the-art to design problems.
Components: Discussion, Lecture
Prereqs/Coreqs: P: MECHNCHL 3630 and MECHNCHL 3640

MECHNCHL 4600 3 credits
Energy Systems Design
Design and analysis of energy conversion systems with emphasis on solar energy. Flat plate and concentrating collectors for air and liquids, storage flow and control systems requirements, solar electric power generation. Wind energy conversion, biomass.
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: MECHNCHL 3630 and MECHNCHL 3640

MECHNCHL 4630 3 credits
Internal Combustion Engine Design
Design of internal combustion engines for various applications. Gasoline engines, diesel engines, 4 stroke cycles and 2 stroke cycles.
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: MECHNCHL 3630 and MECHNCHL 3640

MECHNCHL 4640 3 credits
Mechanical Design of Internal Combustion Engines
Mechanical design and experimental development of internal combustion engines to meet comprehensive design criteria: marketability, thermodynamic performance, dynamic issues, efficiency, lubrication, emissions, economy, drivability, design for manufacture.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: MECHNCHL 3730 or MECHNCHL 4730; C: MECHNCHL 4630.
MECHNCHL 4650 3 credits  
Environmental Control Design  
Theory and design of heating, air conditioning and refrigeration units. Heating and cooling loads for air conditioning, heat pump, psychrometry.  
Components: Discussion, Laboratory, Lecture  
Prereqs/Coreqs: P: MECHNCHL 3630 and MECHNCHL 3640

MECHNCHL 4720 2 credits  
Thermal Systems Laboratory  
Instrumentation and measurement techniques in thermal systems; verification of basic principles; laboratory tests on components of thermal systems; experimental approach for solving engineering problems; application of computer to data acquisition and data processing. (Fall, Spring)  
Components: Laboratory  
Prereqs/Coreqs: P: MECHNCHL 3630 and MECHNCHL 3640. C: MECHNCHL 3720

MECHNCHL 4730 2 credits  
Thermo-Fluid Systems Design  
Design of energy system components. Modeling and simulation of thermal systems. Open-ended design project(s) with application of principles in thermal science. (Fall, Spring)  
Components: Discussion, Laboratory, Lecture  
Prereqs/Coreqs: P: MECHNCHL 3630 and MECHNCHL 3640

MECHNCHL 4750 3 credits  
Computational Methods in Engineering  
Use of digital computers to solve equations encountered in mechanical engineering problems. Numerical integration and differentiation, solution of linear and nonlinear equations, ordinary and partial differential equations (finite element and finite difference methods), systems of equations (matrix equations). Programming using MATLAB. How to choose the proper numerical method, and pitfalls that lead to bad solutions.  
Components: Lecture  
Prereqs/Coreqs: P: MATH 3630

MECHNCHL 4800 3 credits  
Finite Element Method  
Introduction to the finite element method. Emphasis on truss, beam and frame analysis, plane stress, plane strain, axisymmetric and three-dimensional stress analysis. Dynamic analysis and field problems, such as heat transfer. Readily available finite element computer programs utilized to solve stress analysis, heat transfer and other engineering related problems.  
Components: Discussion, Lecture  
Prereqs/Coreqs: P: MECHNCHL 3330

MECHNCHL 4830 3 credits  
Mechatronics  
Study of electro-mechanical systems and their interfaces. Programming of microcontrollers, fractional-horsepower motors, sensors, programmable logic controllers (PLC’s), and control electronics. Binary number systems and logic are introduced. Application of control theory. Project.  
Components: Laboratory, Lecture  
Prereqs/Coreqs: C: MECHNCHL 4320 or ELECTENG 3310

MECHNCHL 4840 3 credits  
Vibration Systems Design  
Modeling and analysis of single and multiple-degree of freedom systems. Free and forced vibrations. Vibrations applications such as balancing, whirling, vibration instruments, vibration isolation, and suspension. Computer applications involving matrices, eigenvalues, eigenvectors, and differential equations. Design of mechanical systems involving vibrations.  
Components: Discussion, Laboratory, Lecture  
Prereqs/Coreqs: P: MECHNCHL 3030

MECHNCHL 4850 3 credits  
Computer-Aided Engineering  
Use of current tools in the design and simulation of mechanical systems. Generation of a paperless project, including solid modeling and computer assembly of mechanical systems, system dynamic analysis, and system optimization. Interfaces between various computer software packages and the creation of computer routines to extend built in software modeling capabilities.  
Components: Laboratory, Lecture  
Prereqs/Coreqs: P: MECHNCHL 3330

MECHNCHL 4930 3 credits  
Senior Design Project  
Team based projects, primarily from industry. Rigorous application of design processes and methods. Consideration of real-life technical, economic, social, aesthetic, environmental and other constraints. Consideration of several related topics such as creativity, analysis, synthesis, project management, scheduling, time management, engineering ethics, communication, personality types, product safety and liability, copyrights and patents, design for manufacture, economics, and robust engineering. Integration of technical and management knowledge in an open-ended design environment. Oral and written reports. Open to graduating seniors only. (Fall, Spring)  
Components: Lecture  
Prereqs/Coreqs: P: MECHNCHL 3230 and MECHNCHL 3830 and MECHNCHL 3730 and MECHNCHL 4730

MECHNCHL 4980 1 - 3 credits  
Current Topics in Engineering  
In-depth study of a current topic of interest to the engineering profession. The topic to be covered will be identified in the course title.  
Components: Discussion, Laboratory, Lecture

MECHNCHL 4990 1 - 3 credits  
Independent Study  
Advanced study in the area of specialization.  
Components: Independent Study  
Prereqs/Coreqs: P: senior standing
Applied Music Courses

MUAP 1010 1 credit
**First Semester Lessons**
Components: Independent Study

MUAP 1110 1 credit
**Second Semester Lessons**
Components: Independent Study

MUAP 2010 1 credit
**Third Semester Lessons**
Components: Independent Study

MUAP 2110 1 credit
**Fourth Semester Lessons**
Components: Independent Study

MUAP 3010 1 credit
**Fifth Semester Lessons**
Private instruction in voice, piano, and orchestra and band instruments. Must be concurrently enrolled in Wind Ensemble, Symphony Band, Sinfonietta, University/Community Orchestra, Marching Pioneers, Concert Choir, University Singers, or Chamber Choir. One half-hour lesson per week per credit. There are no applied music fees above the regular tuition charge, but special course fees (i.e. purchase of music) may apply. Lesson times and instructors to be arranged.
Components: Independent Study
Prereqs/Coreqs: P: must have successfully completed upper divisional examination before enrolling; C: participation in major ensemble as listed above

MUAP 3110 1 credit
**Sixth Semester Lessons**
Private instruction in voice, piano, and orchestra and band instruments. Must be concurrently enrolled in Wind Ensemble, Symphony Band, Sinfonietta, University/Community Orchestra, Marching Pioneers, Concert Choir, University Singers, or Chamber Choir. One half-hour lesson per week per credit. There are no applied music fees above the regular tuition charge, but special course fees (i.e. purchase of music) may apply. Lesson times and instructors to be arranged.
Components: Independent Study
Prereqs/Coreqs: P: must have successfully completed upper divisional examination before enrolling; C: participation in major ensemble as listed above

MUAP 4010 1 credit
**Seventh Semester Lessons**
Private instruction in voice, piano, and orchestra and band instruments. Must be concurrently enrolled in Wind Ensemble, Symphony Band, Sinfonietta, University/Community Orchestra, Marching Pioneers, Concert Choir, University Singers, or Chamber Choir. One half-hour lesson per week per credit. There are no applied music fees above the regular tuition charge, but special course fees (i.e. purchase of music) may apply. Lesson times and instructors to be arranged.
Components: Independent Study
Prereqs/Coreqs: P: must have successfully completed upper divisional examination before enrolling; C: participation in major ensemble as listed above

MUAP 4110 1 credit
**Eighth Semester Lessons**
Private instruction in voice, piano, and orchestra and band instruments. Must be concurrently enrolled in Wind Ensemble, Symphony Band, Sinfonietta, University/Community Orchestra, Marching Pioneers, Concert Choir, University Singers, or Chamber Choir. One half-hour lesson per week per credit. There are no applied music fees above the regular tuition charge, but special course fees (i.e. purchase of music) may apply. Lesson times and instructors to be arranged.
Components: Independent Study
Prereqs/Coreqs: P: must have successfully completed upper divisional examination before enrolling; C: participation in major ensemble as listed above

MUAP 4910 2 credits
**Recital Semester**
For students who are finishing their performance training be preparing their recital. Students will learn the basics of assembling a recital program, perform an extended recital jury for several members of the faculty, work on performance decorum, learn to coordinate their work with accompanists, and write program notes.
Components: Independent Study

Music Courses

MUSIC 1090 1 credit
**Bodywork for Musicians**
Practically based course in posture and psycho-physical awareness. Specific topics include Alexander Technique and Feldenkrais. Required for all music majors.
Components: Lecture

MUSIC 1100 1 credit
**Jazz Ensemble**
Open to performers by permission from faculty within respective field.
Components: Laboratory

MUSIC 1190 1 credit
**World Rhythm Rudiments**
Methods and techniques from around the world will be used to develop rhythmic concepts, reading skills and improvisation through the use of natural sticking, rudiments, and patterns used in drumming from Western, African, Brazilian and Afro Cuban traditions.
Components: Lecture

MUSIC 1200 1 credit
**Percussion Ensemble**
Open to performers by permission from faculty within respective field.
Components: Laboratory

MUSIC 1220 2 credits
**Diction for Singers**
Fundamentals of phonetics and sound production as applied to singing in French, German and Italian.
Components: Lecture
MUSIC 1290  1 credit

**Computer Applications in Music Education**

This course is an introduction to computer applications in music education using the Finale Music Notation Software Program and Apple Works 6. With Finale students will create music scores, learn how to add music markings, extract and print parts and how to use midi keyboard. With Apple 6 students will create spread sheets for grading private lessons and band attendance, do a mail merge and create word processing documents. Students will be required to use the WWW to find sheet music, musical databases and recordings for use in teaching and research.

**Components:** Lecture

MUSIC 1300  1 credit

**Brass Ensemble**

Open to performers by permission from faculty within respective field.

**Components:** Laboratory

MUSIC 1340  1 credit

**Piano Techniques - First Semester**

First semester. Class piano lessons open to all university students. New piano students with previous piano study must audition during registration week to determine placement in the proper section.

**Components:** Lecture

MUSIC 1400  1 credit

**Jazz Combo**

Open to performers by permission from faculty within respective field.

**Components:** Laboratory

MUSIC 1440  1 credit

**Piano Techniques - Second Semester**

Second semester. Class piano lessons open to all university students. New piano students with previous piano study must audition during registration week to determine placement in the proper section.

**Components:** Lecture

MUSIC 1500  1 credit

**Chamber Ensemble**

Open to performers by permission from faculty within respective field.

**Components:** Laboratory

MUSIC 1510  1 credit

**University/Community Orchestra**

The study and performance of symphonic repertoire. Open to all university students and area musicians. Placement audition required.

**Components:** Laboratory

MUSIC 1530  1 credit

**Aural Skills I**

To be taken with Theory 1730. Singing intervals, rhythms and melodies at sight.

**Components:** Lecture

Prereqs/Coreqs: C: MUSIC 1730

MUSIC 1590  3 credits

**Music Appreciation**

A guide to musical enjoyment and understanding through the examination of composition representative of the various musical forms, styles and media. May be used to satisfy partially the university humanities general requirement; not open for credit to music majors.

**Components:** Lecture

GE: Fine Arts

MUSIC 1600  1 credit

**Woodwind Ensemble**

Open to performers by permission from faculty within respective field.

**Components:** Laboratory

MUSIC 1610  1 credit

**University Bands**

Section 1--Wind Ensemble; Section 2--Symphony Band; Section 3--Marching Band; The study and performance of a wide variety of band music, particularly literature; campus and community concerts and tours. Membership is open to all university students by audition.

**Components:** Laboratory

MUSIC 1630  1 credit

**Aural Skills II**

To be taken with Theory 1830. Singing intervals, rhythms and melodies at sight.

**Components:** Lecture

Prereqs/Coreqs: C: MUSIC 1830

MUSIC 1710  1 credit

**Choir**

The study and performance of a wide variety of choral literature. Open to all university students and area musicians. Placement audition required.

**Components:** Laboratory

MUSIC 1730  3 credits

**Music Theory I: Music Theory Fundamentals with MIDI**

An introductory course in music theory covering the writing, analysis, and functional piano keyboard of music theory fundamentals including: notation, scales, intervals, chords, and rhythm reading with computer music and MIDI technology.

**Components:** Lecture

MUSIC 1820  1 credit

**Marching Pioneers**

The study and performance of a wide variety of band music, particularly literature; campus and community concerts and tours. Membership is open to all university students by audition.

**Components:** Laboratory

GE: Physical Education
MUSIC 1830 3 credits
Music Theory II: Tonal Music Theory with MIDI
A study of tonal music theory using piano keyboard and MIDI music technology applications. Students study concepts in music theory including melodic structures, texture, 16th century 2 voice counterpoint, 18th century 4 voice counterpoint, harmonic rhythm, voice leading in 7th chords, modulation, and secondary dominant and leading tone chords. Students will apply the above concepts in musical composition and analysis, and demonstrate performance of musical structures on the piano keyboard.

Components: Lecture
Prereqs/Coreqs: P: MUSIC 1730

MUSIC 1900 1 credit
Basketball Band
Open to performers by permission from faculty within respective field.

Components: Laboratory

MUSIC 1910 1 credit
Choir
The study and performance of men's choral literature (Singing Pioneers - Men's Choir). The study and performance of a wide variety of women's choral literature (Coro D'Angeli - Women's Choir). Open to all university students and area musicians. Placement audition required.

Components: Laboratory

MUSIC 2020 1 credit
Music Theater
Open to performers by permission from faculty within respective field.

Components: Laboratory

MUSIC 2170 1 credit
High Brass Techniques
A course designed to acquaint the prospective teacher with the methods of teaching high brass instruments, especially trumpet and French horn, at the elementary and secondary school levels, and to develop basic proficiency in the actual playing of these instruments.

Components: Laboratory

MUSIC 2250 2 credits
History and Literature of Western Music I
Music history and literature from antiquity to 1550. Required for all music majors.

Components: Lecture
GE: Fine Arts
Prereqs/Coreqs: P: MUSIC 1530 and MUSIC 1730

MUSIC 2270 1 credit
Low Brass Techniques
A course designed to acquaint the prospective teacher with the methods of teaching low brass instruments, especially trombone, euphonium, and tuba, at the elementary and secondary school levels, and to develop basic proficiency in the actual playing of these instruments.

Components: Laboratory

MUSIC 2340 1 credit
Piano Techniques - Third Semester
Third semester. Class piano lessons open to all university students. New piano students with previous piano study must audition during registration week to determine placement in the proper section.

Components: Lecture

MUSIC 2350 2 credits
History and Literature of Western Music II
Music history and literature from 1550 to 1750. Required for all music majors.

Components: Lecture
GE: Fine Arts
Prereqs/Coreqs: P: MUSIC 2250

MUSIC 2370 1 credit
Percussion Techniques
A course designed to develop a knowledge of basic performance and teaching techniques on the elementary and secondary school levels.

Components: Laboratory

MUSIC 2440 1 credit
Music Theater
Fourth semester. Class piano lessons open to all university students. New piano students with previous piano study must audition during registration week to determine placement in the proper section.

Components: Lecture

MUSIC 2450 3 credits
World Music Survey
This course presents music as it is created, performed and experienced in cultures from Latin and North America, Caribbean, India, Asia, and the Pacific. The course provides the background to the musical style of each culture, and explains how music relates to history, social customs, politics and identity. Core cultural institutions such as churches, festivals and families will be studied for the role they play in building and sustaining musical traditions.

Components: Lecture
GE: Fine Arts
Prereqs/Coreqs: P: MUSIC 1590

MUSIC 2470 1 credit
String Techniques
A course intended to develop a basic performing technique and understanding of string instruments and acquaint students with a variety of methods and materials for use at the elementary and secondary school levels.

Components: Laboratory

MUSIC 2500 1 - 3 credits
Topics in Music
In depth study of topics of interest to the music profession. The topic to be studied will be identified in the course title.

Components: Lecture

MUSIC 2530 1 credit
Aural Skills III
Singing intervals, rhythms, and melodies at sight. Harmonic and melodic dictation. To be taken concurrently with Music 2140.

Components: Lecture
MUSIC 2550 3 credits
American Music
A survey course of 20th century music designed to acquaint students with American music from colonial times to the present, with an emphasis on the musical and sociological background which affects its development. May be used to partially satisfy the university humanities general requirement.
Components: Lecture
GE: Fine Arts

MUSIC 2570 1 credit
High Woodwind Techniques
A course intended to develop a knowledge of basic performance and teaching techniques of high woodwinds, especially flute and clarinet, at the elementary and secondary school levels.
Components: Laboratory

MUSIC 2650 3 credits
History of Jazz
An examination of the rich and varied dimensions of jazz music, a genre of music indigenous to the U.S. Detailed study of all major subgenres of jazz, including Dixieland, swing, bebop, cool, and fusion, will form the core of this course, which will also emphasize the innovations of Creole and Black artists.
Components: Lecture
GE: Fine Arts
Prereqs/Coreqs: P: MUSIC 1590

MUSIC 2670 1 credit
Double Reed Woodwind Techniques
A course intended to develop a knowledge of basic performance and teaching techniques of double reed woodwinds, especially oboe and bassoon, at the elementary and secondary school levels.
Components: Laboratory

MUSIC 2730 3 credits
Music Theory III: Advanced Tonal Theory, Counterpoint, and Composition
An advanced course in which students develop mastery and demonstrate comprehension in music theory concepts including: 16th century polyphony analysis, 18th century 2 part invention & fugue analysis, chromatic harmony including borrowed, Neapolitan & augmented 6th chords, introduction to classical forms, extended tertian harmony, altered dominants, chromatic mediants, and music theory in the Romantic era. Students develop performance skills on the piano keyboard of the above theoretical structures and demonstrate mastery of them through composition of musical scores applying computer music and MIDI technology.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 1830

MUSIC 2750 3 credits
History of American Musical Theatre
An examination of a genre of music indigenous to the U.S. Detailed study of all major influences upon American Musical Theatre, including Revues, Cohan, Rodgers & Hammerstein, Bernstein, Sondheim, and Lloyd Webber will form the core of this course, which will also show how musicals have reflected societal and cultural trends in the U.S. since 1900.
Components: Lecture
GE: Fine Arts
Prereqs/Coreqs: P: MUSIC 1590

MUSIC 2770 1 credit
Diction I
Fundamentals of phonetics and sound production as applied to singing Italian and English. Instruction in the International Phonetic Alphabet.
Components: Lecture

MUSIC 2850 3 credits
History of Rock and Roll
An examination of a genre of music indigenous to the U.S. Detailed study of all major periods of rock and roll, including Rockabilly, R&B, Folk Music, the British Invasion, the California Sound, Heavy Metal, Alternative, and Rap will form the core of this course, which will also show how rock and roll has reflected societal and cultural trends in the U.S. since 1950.
Components: Lecture
GE: Fine Arts
Prereqs/Coreqs: P: MUSIC 1590

MUSIC 2870 1 credit
Diction II
Fundamentals of phonetics and sound production as applied to singing German and French. Continuation of material from Music 2770.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 2770

MUSIC 2920 2 credits
Beginning Conducting
The development of basic conducting techniques and an emphasis on practical application of conducting vocal and instrumental music.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 1830

MUSIC 3160 3 credits
Elementary Music Methods for Non-Music Majors
Methods and techniques in music instruction for the elementary school, stressing techniques in singing, listening, use of instruments and materials for planning and directing musical experiences.
Components: Lecture

MUSIC 3170 2 credits
String Pedagogy
This course will introduce string pedagogy issues to music majors and minors who intend to teach strings, work with orchestras, or learn more about the different instruments. Class topics will include: homogeneous groups, heterogeneous groups, choosing methods books, comprehensive teaching, incorporation of national standards.
Components: Lecture

MUSIC 3250 2 credits
History and Literature of Western Music III
Music history and literature from 1750 to 1900. Required for all music majors.
Components: Lecture
GE: Fine Arts
Prereqs/Coreqs: P: MUSIC 2350
MUSIC 3260 2 credits
Instrumental Music Methods I
The first in a two-semester sequence of courses examining the practical and philosophical issues related to instrumental music in the elementary, middle, and secondary level. Topics building the beginner program, rehearsal techniques, and classroom management.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3730;

MUSIC 3270 2 credits
Vocal Pedagogy
This course will introduce vocal pedagogy issues to music majors and minors who intend to teach voice, work with choirs, or learn more about the vocal mechanism. Class topics will include: basic vocal physiology; different vocal teaching philosophies; methods for alleviating performance anxiety; and vocal health.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 2870

MUSIC 3280 2 credits
Wind Literature
A comprehensive study of wind groups focusing on the instrumentation and literature from earliest beginnings to the present. Special emphasis is given to major works, composers, compositional styles, and programming.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3350

MUSIC 3350 2 credits
History and Literature of Western Music IV
Music history and literature from 1900 to present. Required for all music majors. Prereqs/Coreqs: P: Must have successfully completed Upper Divisional examination before enrolling.
Components: Lecture
GE: Fine Arts
Prereqs/Coreqs: P: MUSIC 3250

MUSIC 3360 2 credits
Instrumental Music Methods II
The second in a two-semester sequence of courses examining the practical and philosophical issues related to instrumental music in the elementary, middle, and secondary level. Topics include marching band techniques, program development, and administration.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3260

MUSIC 3370 2 credits
Piano Pedagogy
A review of materials pertinent to piano teaching is made and the techniques of instructions are emphasized.
Components: Lecture

MUSIC 3380 2 credits
Choral Literature
Comprehensive study of choral literature from polyphony’s origins through to the present.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3350

MUSIC 3430 3 credits
Jazz Improvisation and Theory
Jazz Improvisation and Theory provides a systematic approach for understanding the information needed to improvise jazz music. The course covers basic jazz keyboard skills, chord/scale relationships and the study of transcriptions of master jazz improvisers.
Components: Lecture

MUSIC 3440 1 credit
Accompanying
A study of the literature on accompanying and experience in accompanying singers and instrumentalists.
Components: Laboratory

MUSIC 3460 2 credits
Choral Music Methods I
Designed for music majors planning to attain licensure on the 6-12 choral music certification. Emphasis centered around philosophies, methods of teaching, organizing, and administering standard SATB choirs in middle and secondary schools. Special attention is given to working with the middle level student, especially in terms of voice change issues and the dynamics of working with that age of student.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3830 and MUSIC 3920 or consent of instructor

MUSIC 3460 2 credits
Choral Music Methods II
Designed for music majors planning to attain licensure on the 6-12 choral music certification. Emphasis centered around philosophies, methods of teaching, organizing, and administering jazz choirs, show choirs, musicals, and gender-based choirs. Special attention is given to working with the middle level student, especially in terms of voice change issues and the dynamics of working with that age of student.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3460 or consent of instructor

MUSIC 3530 2 credits
Orchestration and Arranging
Basic styles of arranging for small and large ensembles stressed; score reading and manuscript writing also emphasized.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3140

MUSIC 3550 2 credits
Orchestration and Arranging
Basic styles of arranging for small and large ensembles stressed; score reading and manuscript writing also emphasized.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3140

MUSIC 3560 2 credits
Choral Music Methods II
Designed for music majors planning to attain licensure on the 6-12 choral music certification. Emphasis centered around philosophies, methods of teaching, organizing, and administering jazz choirs, show choirs, musicals, and gender-based choirs. Special attention is given to working with the middle level student, especially in terms of voice change issues and the dynamics of working with that age of student.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3460 or consent of instructor

MUSIC 3630 1 credit
Aural Skills IV
Singing intervals, rhythms, and melodies at sight. Harmonic and melodic dictation. To be taken concurrently with Music 3150.
Components: Lecture
Prereqs/Coreqs: C: MUSIC 3140

MUSIC 3660 2 credits
Jazz Techniques
To provide prospective music teachers a systematic approach for developing the skills needed to teach and improvise jazz music in a big band and small group setting at the middle and high school level.
Components: Lecture
MUSIC 3730 3 credits
Music Theory IV: Form and Analysis
A study of form in music and its development from the Renaissance through the 20th century. Students develop an understanding of the historical and theoretical development of musical form through analysis and composition of musical scores with computer music and MIDI applications.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 2730

MUSIC 3760 2 credits
Secondary General Music Methods
Organizing and implementing the general music program at the secondary level, grades 7-12. Required for secondary general music certification.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3140

MUSIC 3780 2 credits
Form and Analysis
A study of tonal music in small and large forms.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3140

MUSIC 3820 2 credits
Music Theory V: 20th Century Music Theory
A study of music theory from the end of the Common Practice Period to the 21st century. The course includes analysis and composition of musical scores in important 20th century compositional practices applying computer music and MIDI applications.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3730; must have successfully completed upper divisional examination before enrolling

MUSIC 3860 3 credits
Elementary Music Methods for Music Majors
Methods and techniques in music instruction for the elementary school, stressing techniques in singing, listening, use of instruments and materials for planning and directing musical experiences. Course designed for general music education majors planning to become certified in this area.
Components: Lecture

MUSIC 3920 2 credits
Intermediate Conducting
An accelerated course in conducting that stresses interpretation of the full score, discipline of the baton and bodily movements, and psychological procedures.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 2220

MUSIC 4010 1 - 3 credits
Music Workshop
Components: Lecture

MUSIC 4230 2 credits
Advanced Conducting Instrumental
Review and refine techniques applicable to instrumental ensembles which were introduced in the first two semesters of conducting. Advanced techniques of score study, transposition concepts, and the handling of asymmetrical time signatures will be added to the conductor's repertoire.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3920

MUSIC 4290 2 credits
Music Media, Midi and Recording Technology
An exciting and timely course intended to provide students with the technical and theoretical basis of knowledge needed in the current use of computer and recording studio technology encountered in professional recording studios, media, and broadcasting. Course topics include: studio audio recording techniques; computer and MIDI keyboard sequencing; digital sampling, sound synthesis, web page design with MP3's and Tiff creation, CD production for portfolios including cover, CD insert design and securing copyright. Students will apply their listening, compositional, and arranging skills acquired in previous courses in the music major.
Components: Lecture

MUSIC 4300 2 credits
Advanced Conducting - Choral
Designed for music majors planning to teach at the secondary level. Emphasis will center on philosophies, methods of rehearsing, organizing rehearsals over time, and studying stylistic issues of choral music.
Components: Lecture
Prereqs/Coreqs: P: MUSIC 3920

MUSIC 4500 1 - 3 credits
Seminar in Music
A critical examination of one area within the field of music, the specific subject to be determined by the instructor and the needs of the student.
Components: Seminar

MUSIC 4510 2 credits
Seminar in Music Business I
A discussion in the major areas of music business. Each week classes will be led by area music industry leaders who will present discussions in their area of expertise. Topics include: an overview of careers in the music industry and necessary qualifications for each; the recording business; marketing recorded music; maintaining studio electronics; sound reinforcement; public relations in the music industry.
Components: Seminar

MUSIC 4520 2 credits
Seminar in Music Business II
A continuing discussion in the major areas of music business. Each week classes will be led by area music industry leaders who will present discussions in their area of expertise. Topics include: electronic media in the music industry; advanced sound reinforcement techniques; legal issues in the music business; entrepreneurship in the music industry; artist management and talent agencies; the local music dealers; concert promotion and booking; producing commercials.
Components: Seminar
Cooperative Field Experience
Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and the department.
Components: Field Studies

Independent Study
By permission of the instructor.
Components: Independent Study

Philosophy Courses

PHLSPHY 1130  3 credits
Introduction to Philosophy
An introduction to basic philosophical questions through a consideration of different types of philosophy as developed by some of history's most influential thinkers and as related to various aspects of human life. (Fall, Spring)
Components: Lecture
GE: Humanities

PHLSPHY 2130  3 credits
Peace Studies: Issues, Ideas and Morality of Nuclear War
A critical study of the literature concerning nuclear war. Technical, strategic and philosophic aspects of nuclear war will be given careful analysis, interpretation and discussion in lecture/readings/discussion format. (Spring)
Components: Lecture
GE: Humanities

PHLSPHY 2230  3 credits
Contemporary World-Views
Major modern philosophical-religious world-views: Hinduism, Buddhism, Judaism, Catholic, Protestantism, Marxism, Secular Humanism, and Atheist Existentialism. (Fall)
Components: Lecture
GE: Humanities, International Education

PHLSPHY 2330  3 credits
Origins of Western Philosophy
Representative thinkers and the development of different traditions in Western philosophy from the pre-Socratics to the Renaissance. (Fall)
Components: Lecture
GE: Historical Perspective-2nd course only, Humanities

PHLSPHY 2430  3 credits
Philosophy in the Modern World
The principal thinkers and movements of Western philosophy from the Renaissance into the 20th century. (Spring)
Components: Lecture
GE: Historical Perspective-2nd course only, Humanities
PHLSPHY 3130 3 credits

**Philosophy of History**
An examination of principal theories regarding what meaning may or may not be discovered in history. (Every other Spring)
- Components: Lecture
- GE: Humanities
- Prereqs/Coreqs: P: three credits in philosophy or consent of instructor

PHLSPHY 3230 3 credits

**Philosophy of Religion**
An examination of major interpretations of what religion is and the significance for it of concepts regarding faith and reason, God, the invisible world, evil, and the nature and destiny of persons. (Every other Fall)
- Components: Lecture
- GE: Humanities
- Prereqs/Coreqs: P: three credits in philosophy or consent of instructor

PHLSPHY 3330 3 credits

**Ontology and Ethics**
The ontological foundation of ethics in the thought of some major moral philosophers. (Every other Spring)
- Components: Lecture
- GE: Humanities
- Prereqs/Coreqs: P: three credits in philosophy or consent of instructor

PHLSPHY 3530 3 credits

**Philosophy's Feminist Future: From Powerism to Personalism**
With a focus on major representatives of philosophical thought, this course will examine ideas which have promoted civilization along sexist lines and other ideas which can contribute to the development of a new kind of civilization rooted in a respect for persons. (Every other Spring)
- Components: Lecture
- Cross Offerings: WOMSTD 3530
- GE: Gender Studies, Humanities
- Prereqs/Coreqs: P: three credits in philosophy or WOMSTD 1130 or consent of instructor

PHLSPHY 3630 3 credits

**Philosophy of Law**
A critical study of major concepts of law with particular emphasis on how the various notions of law are governed by fundamental views concerning the nature of reality and the individual person. (Every other Spring)
- Components: Lecture
- GE: Humanities
- Prereqs/Coreqs: P: three credits in philosophy, CRIMLJUS 1130 or consent of instructor

PHLSPHY 3740 3 credits

**Existentialism**
Examination of the various types of Existentialism and the major philosophical Existentialists, such as Kierkegaard, Nietzsche, Heidegger, Merleau-Ponty, Sartre, de Beauvoir, Jaspers, and Marcel.
- Components: Lecture
- GE: Humanities
- Prereqs/Coreqs: C: PHLSPHY 2430 or consent of instructor

PHLSPHY 4430 3 credits

**Seminar in Philosophy**
A critical examination of a major theme, movement, period or philosopher in the history of philosophy. This is a seminar designed for students who are majors or minors and who are at an advanced stage of the undergraduate study of philosophy. (Once in a two-year cycle)
- Components: Seminar
- GE: Humanities
- Prereqs/Coreqs: P: six credits in philosophy or consent of instructor

PHLSPHY 4660 1 - 8 credits

**Cooperative Field Experience**
Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and department. (Occasionally)
- Components: Field Studies

PHLSPHY 4720 1 - 3 credits

**Individual Research in Philosophy**
Advanced work by the individual students. (Occasionally)
- Components: Independent Study
- Prereqs/Coreqs: P: must be a philosophy major or minor

---

### Physical Science Courses

PHSC 1150 5 credits

**Physical Science**
A presentation of the physics and chemistry of our everyday world, with minimal mathematics. This is a liberal arts science course and does not fulfill program requirements for physics or chemistry. Students taking this course to meet their natural science requirement may not count another physics or chemistry course towards general education. (Spring)
- Components: Laboratory, Lecture
- GE: Natural Science

PHSC 1310 1 credit

**Introductory Astronomy Lab**
Constellation study and telescopic observation of the moon, planets, stars and nebulae; introduction to astronomical techniques and equipment; field trips to regional planetariums and observatories. (Fall)
- Components: Laboratory
- GE: Natural Science
- Prereqs/Coreqs: P or C: PHSC 1340
PHSC 1340 4 credits

**Introductory Astronomy**
Our sky, the origin and dynamics of the solar system, the physical properties of the moon and planets, the sun, space exploration, the stars and stellar evolution, galaxies, cosmology and life in the universe. (Fall)

Components: Lecture
GE: Natural Science

PHSC 3000 1 - 3 credits

**Special Topics in Astronomy**
Special topics and laboratory projects dealing with problems of current interest in astronomy and astrophysics. May be taken for credit more than once.

Components: Lecture
Prereqs/Coreqs: P: PHSC 1340

## Physical Education Courses

**PHYSED 1000** 1 credit

**Fitness Assessment and Management**
This lecture/lab course covers health topics and activities designed to assist students in assessing their health and fitness level and understand what lifestyle modifications are necessary to enhance personal wellness.

Components: Laboratory, Lecture
GE: Physical Education-Wellness

**PHYSED 1020** 2 credits

**Criminal Justice Fitness**
The class integrates the understanding of the demands placed on law enforcement officers with mental and physical self-defense measures. The course builds student knowledge, self-confidence, and physical ability in handling law enforcement related scenarios.

Components: Lecture
GE: Physical Education

**PHYSED 1040** 1 credit

**Canoeing, Kayaking, and/or Rafting in Wisconsin**
This course will develop an appreciation for, and develop basic skills in canoeing, kayaking, and/or rafting skills to the participants and if pursued will promote a lifetime of fitness and enjoyment. This course will require a one day on campus teaching and skills instruction/training and culminate with a Friday-Sunday off campus trip to a Wisconsin river determined by the instructor based on river conditions and camping availability. (Spring, Summer)

Components: Laboratory
GE: Physical Education

**PHYSED 1100** 1 credit

**Seasonal Activities**
Seasonal lifetime recreational activities such as: inline skating, biking, ice skating, snow shoeing, cross-country skiing, weight lifting, hiking, Frisbee golf, and other current trends in lifetime fitness will be covered.

Components: Lecture
GE: Physical Education

**PHYSED 1110** 1 credit

**Weight Training**
Physical education activity.

Components: Laboratory
GE: Physical Education

**PHYSED 1120** 1 credit

**Aerobic Weight Training**
Components: Laboratory
GE: Physical Education

**PHYSED 1130** 1 credit

**Badminton**
Components: Laboratory
GE: Physical Education

**PHYSED 1140** 1 credit

**Basketball**
Components: Laboratory
GE: Physical Education

**PHYSED 1150** 1 credit

**Cycling**
Components: Laboratory
GE: Physical Education

**PHYSED 1190** 1 credit

**Golf**
Components: Laboratory
GE: Physical Education

**PHYSED 1200** 1 credit

**Self Defense**
Components: Laboratory
GE: Physical Education

**PHYSED 1210** 1 credit

**Golf**
A continuation of 1110.
Components: Laboratory
GE: Physical Education

**PHYSED 1220** 1 credit

**Hydroaerobics**
Components: Laboratory
GE: Physical Education

**PHYSED 1230** 1 credit

**Jogging/Walking**
Components: Laboratory
GE: Physical Education

**PHYSED 1240** 1 credit

**Racquetball**
Components: Laboratory
GE: Physical Education

**PHYSED 1250** 1 credit

**Relaxation**
Components: Laboratory
GE: Physical Education
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSED 1280</td>
<td><strong>Personal Conditioning</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1290</td>
<td><strong>Racquetball/Badminton</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1300</td>
<td><strong>Personal Fitness</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1310</td>
<td><strong>Scuba Diving</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1330</td>
<td><strong>Cross-Country Skiing</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1340</td>
<td><strong>Soccer</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1360</td>
<td><strong>Canoeing</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td><strong>Course will explore and teach values of canoeing, rules of safety, demonstration and practice of canoeing, go on an overnight trip on the Wisconsin or Kickapoo River.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1370</td>
<td><strong>Dance Tech/Practice (Ballroom, Latin, Country)</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1380</td>
<td><strong>Triathlon Training</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1410</td>
<td><strong>Swimming</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1430</td>
<td><strong>Tennis</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1440</td>
<td><strong>Volleyball</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1450</td>
<td><strong>Wallyball/Volleyball</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1460</td>
<td><strong>Yoga/Pilates</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td><strong>Through the course of the semester the student will learn how to use various Yoga and Pilates exercises to develop and maintain a health enhancing level of personal fitness.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1530</td>
<td><strong>Bowling</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1550</td>
<td><strong>Wallyball/Volleyball</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1570</td>
<td><strong>Intermediate Weight Training</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1590</td>
<td><strong>Aerobics/Hydroaerobics</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1620</td>
<td><strong>Self-Defense</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1640</td>
<td><strong>Downhill Skiing</strong></td>
<td>1</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1660</td>
<td><strong>Health Education</strong></td>
<td>2</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td><strong>To assist students toward a better understanding of personal and community health problems and of the agencies with which they may work.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(GE: Physical Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSED 1680</td>
<td><strong>Methods in Health, Nutrition, and Physical Education</strong></td>
<td>4</td>
<td>Lecture</td>
</tr>
<tr>
<td></td>
<td><strong>The purpose of this class is to provide introductory content regarding health, nutrition, and physical education. Pedagogical methods and practical teaching experiences provided.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Prereqs/Coreqs: P: TEACHING 1230)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Components:** Laboratory

**GE:** Physical Education
Coaching Principles and Sport First Aid
This course is required by the state of Wisconsin for People who want to coach and are non-teaching majors. (Summer)
Components: Lecture

Movement Education
During this course, students will learn how to teach and spot for the basic level of gymnastics for K-12. Students will also learn how to teach musical structure and basic dance moves for a variety of folk and social dances for K-12.
Components: Lecture

Introduction to Physical Education and Health Promotion
Introduction to skills basic to the teaching of physical education; career orientation; teaching, Physical education majors, minors and concentrations in athletic coaching students only.
Components: Lecture

Adventure Education
This course presents the content, method, and safety of cooperative and initiative games. Teacher candidates will learn to use and implement a ropes course as a classroom for different age groups and diverse populations. Required for all PHYSED majors.
Components: Lecture

Team Sports
During this course physical education majors will develop an understanding of the teaching methods, cues and assessments used in teaching team sports to middle level and high school students, as they relate to the standards of National Association for Sport and Physical Education (NASPE). Examples of individual sports which could be covered: baseball/softball, basketball, football, floor hockey, lacrosse, soccer, volleyball, water polo.
Components: Lecture

Adventure Education Practicum
This practicum requires the Physical Education Teacher candidates to assist in the facilitation of groups who attend the UWP ropes and challenge course. Teacher candidates will design and facilitate a sequential experience for the participants, and become proficient in facilitating, belaying, safety, and processing techniques. This practicum will allow candidates to practice and improve their teaching techniques with a variety of populations.
Components: Lecture

Adapted Aquatics
This course will provide instruction and service learning opportunities in the area of adapted aquatics. Activities will include: development and implementation of individualized aquatics programming, development of individualized education program (IEP) paperwork related to aquatics, individual or small group instruction, exposure to aquatics equipment and usage, assessment implementation, and self and/or instructor evaluation of teaching methods.
Components: Lecture
Prereqs/Coreqs: P: PHYSED 2030

Stress Management at the Worksite
Designed to educate the student in the factors affecting one’s personal stress level, the components of an advantageous stress management program and the techniques of facilitating relaxation exercises.
Components: Lecture

Teaching Issues Relating to Alcohol, Drugs, and Sexuality
Curriculum planning methods and teaching of sex education and alcohol and drugs education.
Components: Lecture
Prereqs/Coreqs: P: PHYSED 2030

Exercise Among Maturing Adults
The purpose of this course is to learn more about the adult to elderly population, and the best research supported means of starting and adhering to an exercise program. Topics to be discussed include but are not limited to: physiological developments and changes of this population, safe and recommended lifetime activities and exercise options for this population, reasons for starting an exercise program, reasons for adherence, common mental and physiological illnesses and diseases among this population, nutrition and medication needs, and their role in exercise.
Components: Lecture
Prereqs/Coreqs: P: PHYSED 3330
PHYSED 3330  2 credits
**Lifetime Activities**
For the physical education teacher candidate to experience, implement, and instruct lifetime activities in their physical education curriculum.
  Components: Lecture

PHYSED 3340  2 credits
**Football Coaching**
This course covers the theory of football coaching and the techniques for teaching the skills. The course prepares the individual for coaching football in a high school or college setting.
  Components: Laboratory

PHYSED 3360  1 credit
**Fitness Evaluation**
Designed to teach the student methods for evaluating the components of health fitness in various age groups and fitness populations.
  Components: Laboratory
  Prereqs/Coreqs: P: PHYSED 3020

PHYSED 3380  2 credits
**Fitness Programming and Prescription**
Designed to teach the student how to develop and implement fitness programs for various populations. The student will investigate the concept of exercise adherence and the factors affecting it. The student will be conducting a case study on practical implementation and development of fitness programming and exercise prescription.
  Components: Laboratory
  Prereqs/Coreqs: P: PHYSED 3360

PHYSED 3400  2 credits
**Outdoor Activities/Water Safety Instruction (WSI)**
  Components: Lecture

PHYSED 3420  2 credits
**Health Promotion at the Worksite**
This course prepares the student to plan and implement a health promotion program in a corporate or workplace setting.
  Components: Lecture

PHYSED 3430  3 credits
**Teaching Children with Exceptional Abilities in Health and Physical Education**
Knowledge provided regarding conditions which impede psychomotor functioning. A generic approach to adapting physical education to the needs of special populations. Information on assessment and IEP formation provided.
  Components: Lecture
  Prereqs/Coreqs: P: admission to the School of Education

PHYSED 3440  2 credits
**Elementary/Middle School Physical Education**
This course explores all the elements of planning for, managing, and instructing physical education classes. Students will be given the opportunity to work directly with school-age students, and reflect upon their experiences. Students will plan lessons, evaluate in-service teachers as well as their peers, and develop a number of teaching strategies.
  Components: Laboratory
  Prereqs/Coreqs: P: admission to the School of Education

PHYSED 3500  3 credits
**Methods in Teaching Health Education**
Utilization of approved methods and materials for teaching health in grades kindergarten through 12; application of course content and procedures involved in health teaching.
  Components: Lecture
  Prereqs/Coreqs: P: admission to the School of Education and PHYSED 2030

PHYSED 3510  2 credits
**Assessment and Screening in Physical Education**
Knowledge provided regarding principles for selection of assessment/screening tools and administrative considerations. Practical opportunities to administer, score, and interpret a variety of tools. Production of goals and objectives based on assessment/screening results.
  Components: Laboratory
  Prereqs/Coreqs: P: admission to the School of Education and PHYSED 3430

PHYSED 3610  1 credit
**Coaching Basketball**
Designed to cover the basics of coaching basketball in a competitive setting. Anyone interested in coaching basketball is eligible to take this course. This course does not satisfy the General Education requirement for a physical activity course.
  Components: Laboratory

PHYSED 3720  3 credits
**Kinesiology**
The science of human motion and its application to physical education activities.
  Components: Lecture
  Prereqs/Coreqs: P: admission to the School of Education and (BIOLOGY 2140 or BIOLOGY 2340)

PHYSED 3830  2 credits
**Perceptual Motor Learning and Motor Development**
An analysis of how we gain an awareness of the external world by the organization of sensory data. The traditional problems of perception are explored along with theoretical approaches to these problems.
  Components: Lecture
  Prereqs/Coreqs: P: admission to the School of Education

PHYSED 3850  2 credits
**Nutrition**
Food nutrients and their relationships to health of children; integration of nutrition into the elementary school curriculum.
  Components: Lecture

PHYSED 3920  2 credits
**Emotional Health**
The influence of emotional health on the total education of the school age child as a basis for a healthy personality.
  Components: Lecture

PHYSED 4020  2 credits
**Psychology of Coaching**
The principles and techniques applicable to coaching interschool activities.
  Components: Lecture
PHYSED 4230  3 credits
Methods in Middle/Secondary Physical Education
This course explores all the elements of planning for, managing, and instructing physical education classes. Students will be given the opportunity to work directly with school-age students, and reflect upon their experiences. Students will plan lessons, evaluate in-service teachers as well as their peers, and develop a number of teaching strategies.
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education

PHYSED 4320  2 credits
Consumer Health
A survey and analysis of today’s public health problems. An overview describing the relationship between the health of consumers and the use of products and services.
Components: Lecture

PHYSED 4330  4 credits
Organization, Administration, and Curriculum of Physical Education and Health
Examination of the basic personal leadership and administrative skills necessary to manage physical education, fitness and sport-athletic programs.
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education

PHYSED 4370  1 credit
Lifeguard Training
The purpose of this class is to provide the student with knowledge and skills of lifeguarding. Includes Red Cross certification.
Components: Laboratory

PHYSED 4380  1 credit
Water Safety Instructor
Instruction in teaching Red Cross swimming lessons and water safety courses. Red Cross certification as water safety instructor.
Components: Laboratory

PHYSED 4410  3 credits
Seminar in Health Promotion
This course will be a forum to discuss current issues in all content standards of health education and the relationship to the UWP Health Promotion Standards. The content area of community health will be stressed. The remaining content areas will be linked to community outreach. This seminar course is ideally designed to be student driven, and only facilitated by the instructor.
Components: Lecture
Prereqs/Coreqs: P: PHYSED 3500

PHYSED 4420  1 - 2 credits
Practicum in Athletic Coaching
Actual experience related to the coaching of an athletic team under the leadership of an experienced coach and teacher.
Components: Field Studies

PHYSED 4430  1 - 3 credits
Current Issues in Health and Physical Education
Study of current topics in health and physical education.
Components: Lecture

PHYSED 4520  2 credits
Injury Prevention and Treatment
Athletic training will consist of instruction in taping techniques for athletic injuries. It will also include recognition, treatment and rehabilitation of common athletic injuries and instruction in the use of protective sports equipment.
Components: Lecture
Prereqs/Coreqs: P: BIOLOGY 2140 or BIOLOGY 2340

PHYSED 4530  3 credits
Practicum in Adapted Physical Education
Students are provided the opportunity to work with children with disabilities in an educational setting.
Components: Field Studies
Prereqs/Coreqs: P: admission to the School of Education and PHYSED 3430 and PHYSED 3510 and TEACHING 3320

PHYSED 4620  2 credits
Advanced Athletic Training
Deals with sport specific injuries, their prevention and treatment, and rehabilitation. The course also includes evaluation of injuries and the use of modalities in treatment.
Components: Lecture
Prereqs/Coreqs: P: PHYSED 4520

PHYSED 4840  1 - 4 credits
Athletic Training/Rehabilitation Internship
An internship under the supervision of a certified athletic trainer.
Components: Field Studies
Prereqs/Coreqs: P: PHYSED 4620

PHYSED 4850  3 credits
Level I Wellness-Fitness Internship
Level I is served in the Health and Physical Education Fitness Lab. Expected outcomes are competencies in the use and maintenance of testing equipment, ability to analyze test data and the use of computer software.
Components: Field Studies

PHYSED 4860  3 credits
Level II Wellness-Fitness Internship
Level II involves experience in a wide variety of situations, including classroom and small groups instruction, testing of students and non-students in the PE Fitness Lab, demonstration and individual counseling of 2-3 students as their personal trainer.
Components: Field Studies

PHYSED 4870  8 - 12 credits
Level III Wellness-Fitness Internship
Off-Campus Internship at a Fitness Club, a Corporate Fitness Program, A YMCA/YWCA or Health related facility with PE department approval of site.
Components: Field Studies

PHYSED 4940  3 credits
Seminar in Community and Environmental Health Education
Problems in health education. Devised to meet needs of the individual student in regard to health service, environment and instruction.
Components: Seminar
Prereqs/Coreqs: P: admission to the School of Education
Physics Courses

PHYSED 4960 1 - 3 credits
Independent Study in Physical Education
Components: Independent Study

PHYSED 4990 1 - 3 credits
Independent Study in Health Education
Components: Independent Study

Physics Courses

PHYSICS 1050 5 credits
Principles of Physics
Mechanics, waves, fluid dynamics, heat, electricity, magnetism, light and optics. This course emphasizes the use of physics principles in analyzing physical systems. (Spring)
Components: Discussion, Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: MATH 15 or MATH 1530 or mathematics proficiency level of 15 or above

PHYSICS 1350 5 credits
Introductory Physics I
Mechanics, thermodynamics, and wave properties for science and pre-professional students, including an introduction to experimental techniques and experiments. This course is the first semester of a two-semester sequence; students looking for a one-semester algebra-based physics course should take PHYSICS 1050. (Fall)
Components: Discussion, Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: MATH 1530 or MATH 2450 or math proficiency level of 30 or above

PHYSICS 1450 5 credits
Introductory Physics II
A continuation of PHYSICS 1350 including topics and experiments in electricity and magnetism, optics, atomic physics, and nuclear physics.
Components: Discussion, Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: PHYSICS 1140 or PHYSICS 1350

PHYSICS 2240 4 credits
General Physics I
Mechanics and wave properties for students of engineering, mathematics, and science, including an introduction to experimental techniques and experiments. (Fall, Spring)
Components: Discussion, Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P or C: MATH 2740

PHYSICS 2340 4 credits
General Physics II
Electricity, magnetism, and optics for students of engineering, mathematics, and science, including an introduction to experimental techniques and experiments. (Fall, Spring)
Components: Discussion, Laboratory, Lecture
GE: Natural Science
Prereqs/Coreqs: P: PHYSICS 2530 or PHYSICS 2240 with a "C" or better; and P or C: MATH 2840

PHYSICS 2410 1 credit
Physics of Sound
An introduction to acoustics with emphasis on engineering applications.
Components: Lecture

PHYSICS 3140 4 credits
Modern Physics
An introduction to special relativity, kinetic theory, quantum physics, the Schrodinger equation in one and three dimensions, a brief introduction to nuclear physics, energy bands of crystalline solids, the physics of semiconductors and its application to semiconducting devices. (Fall, Spring)
Components: Discussion, Laboratory, Lecture
Prereqs/Coreqs: P: PHYSICS 2640 or PHYSICS 2340 with a "C" or better. C: MATH 3630

Political Science Courses

POLISCI 1130 3 credits
Introduction to Politics
A survey of the principles of political analysis, covering topics such as the nature of politics, the political experience, decision-making, traditions of politics and comparative political systems.
Components: Lecture
GE: Social Sciences

POLISCI 1230 3 credits
Introduction to American Government
Origin and nature of American federal system, federal and state constitutions, electoral process, structure and functions of federal, state and local government, and individual rights and civil liberties.
Components: Lecture
GE: Social Sciences

POLISCI 1330 3 credits
International Relations
The foundations of national power, the causes of conflict in world politics, and the efforts to deal with such conflicts particularly through international organizations.
Components: Lecture
GE: International Education, Social Sciences

POLISCI 1430 3 credits
Current Issues and Democracy
Discussion of the issues of major conflict, the essence of democracy, the nature of technological democracy and its future.
Components: Lecture
GE: Social Sciences

POLISCI 1530 3 credits
Introduction to Public Policy
A survey and review of government public policy and public policy making. Investigation, differing explanations and alternative arguments about what government should and should not do including consideration of various public policies.
Components: Lecture
GE: Social Sciences
POLISCI 2430 3 credits
Comparative Politics
Non-American political systems and experiences of countries coping with political change; studies of models of values, stereotypes, incentives and sanctions within the network of interdependent elements that create a sense of publicness and authority.
Components: Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: P: POLISCI 1130 or POLISCI 1230

POLISCI 2940 3 credits
The Political Economy of Race, Gender and Ethnicity
This course uses economic principles to analyze salient issues involving people of color, women, and ethnic minorities. The focus is interdisciplinary, drawing from the fields of business and political science, and others. Analysis occurs within the contextual framework provided by guest presenters having expertise in areas of race and ethnic studies and women studies. Pertinent principles and concepts are used to analyze causes and effects of the changing composition of U.S. families, to examine the nature and extent of discrimination within the U.S. economy, and to understand why issues involving race, ethnicity, and gender are of concern to us both individually and collectively. (Fall, Spring)
Components: Lecture
Cross Offerings: ECONOMIC 2940, ETHNSTDY 2940
GE: Ethnic and Gender, Social Sciences

POLISCI 3230 3 credits
Introduction to Public Administration
The role of administration in modern American government, its basic characteristics and the problems of making it efficient and holding it responsible.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: POLISCI 1130 or POLISCI 1230

POLISCI 3320 3 credits
Congressional Politics
The powers, functions and processes of Congress, the role of political parties and pressure groups, and the relation of Congress to the other branches of government.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: POLISCI 1230

POLISCI 3330 3 credits
American Political Parties and Interest Groups
Interest groups and political parties as forces that mold public policy.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: POLISCI 1230

POLISCI 3340 3 credits
Modern Japan
Social, cultural, and political history of Modern Japan from the 17th Century to the present.
Components: Lecture
Cross Offerings: HISTORY 3950
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1020 or consent of instructor or department chair

POLISCI 3350 3 credits
Modern China
Social, cultural, and political history of Modern China from the 19th century to the present.
Components: Lecture
Cross Offerings: HISTORY 3970
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1020 or consent of instructor or department chair

POLISCI 3520 3 credits
The Judicial Process
The American judicial process, trial and appellate courts as well as the role of the U.S. Supreme Court. A comparison of the Anglo-American judicial system with that of continental Europe.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: POLISCI 1230

POLISCI 3530 3 credits
State and Local Government
Structure and functions of state and local government, implementation of public policy, governmental agencies and administrative services, and city-suburban and metropolitan issues. Special attention is given to the political and policy effects of the dynamic changes taking place in the urban centers in Wisconsin as well as in the neighboring states.
Components: Lecture

POLISCI 3540 3 credits
Politics of the Global Economy
An analysis of the operation and powers of multinational corporations, their methods of influencing the electoral process, the legislative and executive branches in the United States and abroad; their future role in world economy and politics and development of the Third World countries.
Components: Lecture
GE: International Education, Social Sciences
Prereqs/Coreqs: junior standing to enroll in this course

POLISCI 3720 3 credits
Ethnic Rights and Politics
Changing patterns of ethnic, gender and race relations; legislative and judicial developments affecting civil rights; political movements, political, social and economic discrimination; judicial system and legal protection for civil rights. Women and other minorities.
Components: Lecture
Cross Offerings: ETHNSTDY 3720
GE: Ethnic Studies, Social Sciences
Prereqs/Coreqs: P: POLISCI 1230 or consent of instructor
POLISCI 3750  3 credits
**International Human Rights**
This course examines the subject of international human rights primarily in the post-1945 era. The course involves the examination, analysis and discussion of major theories, legal norms, criminal procedures and state and international diplomacy in the human rights field. The course integrates theory and praxis with the case study method.

Components: Lecture
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: POLISCI 133

POLISCI 3830  3 credits
**Civil Liberties**
Law and power and their abuses; law and power in relation to war on crime, deviance, freedom of religion, expression and civil disobedience; criminal and civil cases, group action.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: POLISCI 1230

POLISCI 4120  3 credits
**Modern Russia**
Political, social, economic, and cultural history of North Central Asia from the middle of the nineteenth century until the present time, with particular attention to Russian civilization, and the political evolution from Russian empire, to Soviet partocracy, to presidential republic.

Components: Lecture
Cross Offerings: HISTORY 4120
GE: Historical Perspective, International Education
Prereqs/Coreqs: P: HISTORY 1020 or consent of instructor or department chair

POLISCI 4420  3 credits
**Constitutional Law**
Constitutional law and political process, judicial review, civil liberties, rights and responsibilities, the role of the Supreme Court in the educational environment and student rights.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: POLISCI 1130 or POLISCI 1230

POLISCI 4660  1 - 8 credits
**Cooperative Field Experience**
Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and department.

Components: Field Studies
Prereqs/Coreqs: P: junior standing to enroll in this course

POLISCI 4720  1 - 3 credits
**Study and Research in Political Science**
Supervised individual or team study and investigation of a selected topic.

Components: Independent Study
Prereqs/Coreqs: P: junior standing with at least 15 credit hours completed in political science

POLISCI 4730  1 - 3 credits
**Trial Advocacy**
Students prepare both sides of a civil or criminal case for trial playing attorney and witness roles. Knowledge of courtroom procedure and rules of evidence along with skills of teamwork, critical and analytical thinking, and persuasive public speaking are applied.

Components: Lecture

POLISCI 4760  1 - 3 credits
**Seminar in Selected Topics in Political Science**
Presentation of a selected topic normally not of a permanent nature or suitable for a regular course. Besides regular class presentations by students and examinations, a term paper is required.

Components: Seminar
Prereqs/Coreqs: P: junior standing

---

**Psychology Courses**

PSYCHLGY 1130  3 credits
**General Psychology**
An introductory course designed to acquaint the student with the language and methods of psychology and to examine factors affecting human behavior in the areas of motivation, development, intelligence, personality and abnormal behavior.

Components: Lecture
GE: Social Sciences

PSYCHLGY 2010  1 credit
**Careers in Counseling and Human Services**
Career fields open to individuals with a bachelor's degree in psychology are explored through field trips, invited speakers, and individual research. While the focus is on counseling and human services positions, applications in business settings are also included.

Components: Lecture
Prereqs/Coreqs: P: PSYCHLGY 1130

PSYCHLGY 2030  3 credits
**Psychology of Personal Adjustment**
Surveys the varieties of psychological adjustment from healthy to abnormal coping styles. Includes theoretical underpinnings of personality, the influence of socialization, the issues involved in stress and stress management techniques, and practical applications of psychological principles to everyday living.

Components: Lecture
GE: Social Sciences

PSYCHLGY 2230  3 credits
**Introduction to Experimental Psychology**
Commitment to a scientific approach to understanding behavior is what unifies psychology as a profession. This course is designed to introduce students to the basic research methodology of experimental psychology. Course topics include the process of conducting and evaluating research, ethical issues, and the American Psychological Association conventions for the presentation and publication of scholarly materials.

Components: Lecture
Prereqs/Coreqs: P: PSYCHLGY 1130 with a “C” or better and MATH 15 or MATH 1530 or mathematics proficiency level of 15 or above
PSYCHLGY 2530 3 credits
**Psychology of Women**
Explores the shaping of women's behaviors and self-concepts by biological and social influences. Also covers the empirical support for and against gender-related differences in behavior and thought patterns.

Components: Lecture
Cross Offerings: WOMSTD 2530
GE: Gender Studies, Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130 or one course in women's studies

PSYCHLGY 3000 3 credits
**Cognitive Psychology**
An analysis of how information about the environment is received, organized, interpreted, stored and recalled, and how these functions affect the behavioral capacities of the individual.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 2230

PSYCHLGY 3010 3 credits
**Industrial Psychology**
This course will provide students with the opportunity to apply the principles of psychology to the work place. Students will engage in role play, team debates, and group discussions. Topics to be addressed include employee motivation, leadership, personality types at work, interpersonal communication, group dynamics and much more. Students will acquire the skills necessary to succeed in today's work force.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130 and second semester sophomore standing

PSYCHLGY 3030 3 credits
**Learning and Behavior**
Basic theoretical principles and empirical investigations in the area of learned and unlearned behavior in animals, with applications to human behavior.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 2230

PSYCHLGY 3130 3 credits
**Child Psychology**
Surveys the psychological facts, principles, and methods relative to child development from conception to the onset of puberty.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130 and sophomore standing

PSYCHLGY 3230 3 credits
**Adolescent Psychology**
The physical, emotional, social and intellectual characteristics and problems of the adolescent.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130 and sophomore standing

PSYCHLGY 3330 3 credits
**Psychological Measurement**
A survey of psychological testing with emphasis on the evaluation, administration, interpretation and statistical analysis of the results of psychological measuring devices and techniques.

Components: Lecture
Prereqs/Coreqs: P: PSYCHLGY 1130, MATH 1830 and junior standing

PSYCHLGY 3430 3 credits
**Physiological Psychology**
Basic anatomy and function of the nervous system; research bearing on the role of physical mechanisms underlying perception, emotion, motivation and learning.

Components: Lecture
Prereqs/Coreqs: P: PSYCHLGY 2230 (for biology majors - P: PSYCHLGY 1130 AND either BIOLOGY 1650 or BIOLOGY 2340 or both BIOLOGY 2140 and BIOLOGY 2240)

PSYCHLGY 3530 3 credits
**Social Psychology**
Communication, socialization, and the function of the individual in the group; motivation, attitudes, value, leadership, conformity, prejudices and stereotypes, and the social influences they have on the function and development of the self and personality.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130 and sophomore standing

PSYCHLGY 3630 3 credits
**The Psychology of Human Sexuality**
Why and how we behave sexually, male-female differences, the development and changing of sexual values; many variations of sexual behavior and sex crimes.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: sophomore standing to enroll in this class

PSYCHLGY 3830 3 credits
**Psychology and Religion**
A survey of the relationships between psychology and religion; mysticism and behaviorism; religious healing and psychotherapy. The psychology underlying religious beliefs and practices.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130

PSYCHLGY 3960 2 credits
**Behavioral Research I**
Studies of research methodology, ethics, and applied statistics will result in the design of a research proposal approved by your instructor and by the Institutional Review Board for the Protection of Human Subjects (IRB). Activities throughout the semester will focus on the development of critical thinking skills. Behavioral Research II (PSYCHLGY 3970) should be taken in the semester immediately following this course.

Components: Discussion, Lecture
Prereqs/Coreqs: P: PSYCHLGY 2230 with a "C" or better and MATH 1830 and Psychology major or consent of department chair
PSYCHLGY 3970 3 credits

**Behavioral Research II**

Behavioral Research II should be taken in the semester immediately following Behavioral Research I (PSYCHLGY 3960). The research project designed in PSYCHLGY 3960 will be implemented. Students will complete data collection and analysis, prepare a manuscript in APA format, and present their research. Competencies with the Statistical Package for the Social Sciences (SPSS) and with the critical assessment of research will be developed.

Components: Lecture
Prereqs/Coreqs: P: MATH 1830 and PSYCHLGY 3960 with a “C” or better, a Psychology major or consent of department chair

PSYCHLGY 3990 3 credits

**Psychology of Adulthood and Aging**

The purpose of this course is to provide a general introduction to the multi-disciplinary field of gerontology and examine the biological, social and psychological dimensions of adult development. While the primary focus is on an examination of the theoretical and empirical research on the aging process, students will also have the opportunity to be exposed to aging from an experiential perspective.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130 and sophomore standing

PSYCHLGY 4020 1 - 3 credits

**Contemporary Issues in Psychology**

This course provides students an opportunity to explore the current issues of academic and applied psychology through research and discussion. May be taken more than once if topic is different.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130 and other prerequisites as appropriate to the topic

PSYCHLGY 4030 3 credits

**Theories of Personality**

The views of leading personality theorists regarding such central issues as the organization of normal personality, its development and dynamics, socialization, description, assessment, and understanding.

Components: Lecture
Prereqs/Coreqs: P: PSYCHLGY 1130 and junior standing

PSYCHLGY 4330 3 credits

**History and Systems of Psychology**

This course is designed to provide a detailed account of the history of psychology. It encompasses both the philosophical antecedents of modern psychology as well as the influential pioneers in the field of psychology.

Components: Lecture
Prereqs/Coreqs: P: PSYCHLGY 2230 and a minimum of twelve 3000 level or higher credits in psychology or consent of instructor

PSYCHLGY 4430 3 credits

**Abnormal Psychology**

Psychology of abnormal behavior; biological and social factors in the genesis of behavioral, emotional and personality disorders. Brain disorders, psychoses, and substance abuse are also presented and discussed.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130 and junior standing

PSYCHLGY 4660 1 - 8 credits

**Cooperative Field Experience**

Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the assignment, type of experience, number of credits, & evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student & department. Minimum prerequisites for enrollment in Cooperative Field Experience include but are not limited to the following: 1)Completion of at least 60 credits with a minimum GPA of 2.50 overall & a minimum GPA of 3.00 for courses completed within the Psychology Department. 2)Completion of 15 credits of appropriate course work in psychology. 3) Completion of all general requirements in English, speech & mathematics. 4)Student must obtain recommendations from 2 psychology faculty members. 5)Approval of the departmental chairperson, as well as the CFE supervisor. Four credits may be completed toward requirements for the major; up to 3 credits may count toward requirements for the minor; up to 8 credits may count toward the 120 required for graduation.

Components: Field Studies
Prereqs/Coreqs: P: junior standing

PSYCHLGY 4730 1 - 3 credits

**Individual Study in Psychology**

Components: Independent Study
Prereqs/Coreqs: P: senior standing; 20 credits in Psych; 2.50 minimum GPA; 3.00 GPA in Psych; completion of all general university requirements in English, speech and math

PSYCHLGY 4830 3 credits

**Psychology and the Law**

Modern psychological principles in law enforcement, correction and treatment, and the delinquent and criminal personality with a survey of predictive instruments and special problems.

Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: PSYCHLGY 1130 and junior standing

PSYCHLGY 4840 3 credits

**Substance Abuse: Theory, Assessment, and Intervention**

This course is designed to provide an overview of chemical abuse and dependency. Included in this approach will be coverage of addiction theory, assessment and treatment of abuse and dependency. Particular attention will be spent on vulnerable populations, including teens, sexual minorities, and culturally, socially and/or economically oppressed groups.

Components: Lecture
Cross Offerings: CRIMLJUS 4840
PSYCHLGY 4930 3 credits
*Techniques of Counseling and Psychotherapy*
Survey of procedures used by psychologists, including counseling, psychotherapy, and limited psychodiagnostics. Practice procedures and applications are also emphasized.
Components: Lecture
Prereqs/Coreqs: P: nine credits in psychology and junior standing

PSYCHLGY 4940 3 credits
*Advanced Techniques of Counseling and Psychotherapy*
This course provides students opportunities to expand, implement and refine counseling skills. It affords opportunities for students to learn more advanced techniques, as well as to practice basic counseling skills. The course covers processes of counseling, ethical considerations, theoretical applications, and special populations.
Components: Lecture
Prereqs/Coreqs: P: PSYCHLGY 4930 or COUNSLED 7020 or consent of instructor

PSYCHLGY 4950 3 credits
*Human Service Work with Groups and Organizations*
Expands upon the approaches learned in Psychology 4930 and extends them to work with families, groups, organizations, and the community. Students learn the assessment and intervention techniques used by human services workers. This course emphasizes the general systems theory and the ecological perspective.
Components: Lecture
Prereqs/Coreqs: P: PSYCHLGY 4930 or COUNSLED 7020 or consent of instructor

Reclamation Courses

RECLAM 1010 3 credits
*Introduction to Reclamation*
The basis for reclamation in ethics and practice. Applications of science, agriculture, engineering and law in reclamation problems answered through lecture and field presentations made by the major faculty members of the reclamation program and guest speakers from the profession.
Components: Laboratory, Lecture

RECLAM 3010 1 - 3 credits
*Current Topics in Reclamation*
Selected topics in current reclamation problems examined in either lecture, laboratory, or field presentations.
Components: Laboratory, Lecture

RECLAM 3020 3 credits
*Reclamation Revegetation*
Selection and identification of adapted herbaceous and woody species for reclamation, site revegetation, and planting methods. Restoration techniques for design, construction and maintenance of wetlands, prairie, woodland, and riparian habitat.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: BIOLOGY 3450 or RECLAM 1010 or consent of instructor

RECLAM 3880 3 credits
*Environmental Law*
A study of historical concepts and common law rules and their effect on the development of environmental law; examination of state and federal statutes, regulations and case law relating to land use, pollution control and preservation of natural resources; exploration of the legal frontiers of environmental protection and restoration.
Components: Lecture
Prereqs/Coreqs: C: four credits of lab science and junior standing

RECLAM 3900 1 - 4 credits
*Reclamation Demonstration Field Trip*
A field trip of approximately two-week duration taken during summer or spring interim to major reclamation projects and research centers. The trip is run in successive years to different regions of the United States. The role of local, state, and federal governments and private industry in reclamation is studied through numerous site visits. The keeping of a photographic log and journal is required. One trip is required of all reclamation majors.
Components: Field Studies
Prereqs/Coreqs: P: sophomore standing or consent of instructor

RECLAM 3940 3 credits
*GIS / GPS and Mapping*
Geospatial concepts integrating digital orthophotography, global positioning systems, and geographic information systems for natural resource and conservation-related applications. Use of technology in conjunction with a field component. (Fall)
Components: Laboratory, Lecture
Prereqs/Coreqs: P: COMPUTER 1830 or consent of instructor

RECLAM 4660 1 - 8 credits
*Cooperative Field Experience*
Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry, or institution. The nature of the assignment, type of experience, number of credits, and evaluation procedure to be stipulated in an agreement between the student and director of reclamation.
Components: Field Studies
Prereqs/Coreqs: P: junior standing or consent of instructor

RECLAM 4920 1 - 3 credits
*Independent Study*
Independent research project with a written report or paper required. Done under supervision of a faculty member.
Components: Independent Study

RECLAM 4940 3 credits
*Reclamation Project Management*
Project management concepts are applied to environmental and conservation-related issues and activities. Concepts include definitions, role of project manager, project life cycle, project control cycles, project management tools, project team and organizational factors, and plan implementation. Leadership, team building and communication skills are emphasized. Service learning projects, written reports, and presentations.
Components: Lecture
Prereqs/Coreqs: P: junior standing or consent of instructor
Sociology Courses

SOCIOLOGY 1030 3 credits
Principles of Sociology
An introduction to the study of society. This course examines concepts such as group, social interaction, culture, norm, value, status, role, and deviance, and explores how these relate to organizations, institutions, stratification, and social behavior.
Components: Lecture
GE: Social Sciences

SOCIOLOGY 1130 3 credits
Introductory Anthropology
Brief survey of the four sub-disciplines of anthropology: archaeology, linguistics, cultural anthropology and physical anthropology. Using an evolutionary framework, basic concept and theories of anthropology will be introduced.
Components: Lecture
GE: International Education, Social Sciences

SOCIOLOGY 1230 3 credits
Marriage and Family
Dating, courtship, engagement, sexual expression, marriage adjustment and childrearing in American society as related to success and failure in marriage.
Components: Lecture
GE: Social Sciences

SOCIOLOGY 2130 3 credits
Cultural Anthropology
General introduction to the methods, theories, concepts and subject matter of cultural anthropology. The nature of culture, the social system, culture change, cultural evolution, and culture as a symbol system will be considered.
Components: Lecture
GE: International Education, Social Sciences

SOCIOLOGY 2230 3 credits
Women, Sex Roles and Society
An investigation of the status of women and how women live their lives in relationship to each other and to men. The course examines women's current conditions in the United States, alternative conditions in other times and places, and the prospects for change. Different attempts to explain those conditions and relationships are examined.
Components: Lecture
Cross Offerings: WOMSTD 2230
GE: Gender Studies, Social Sciences

SOCIOLOGY 2330 3 credits
Contemporary Social Problems
An overview of the causes, consequences and potential solutions of modern social issues and problems such as majority-minority relations, sex roles, deviance, population, resources, crime, war and peace, unemployment and economic disruption; consideration of the place of social planning.
Components: Lecture
GE: Social Sciences

SOCIOLOGY 3130 3 credits
Social Change
A broad overview of social and cultural change. Major theories of social change are presented; selected specific changes occurring in our society and in other cultures are examined.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: SOCIOLGY 1030

SOCIOLOGY 3230 3 credits
Human Relations
Social stratification based upon race and nationality and cultural differences. Prejudice and discrimination are analyzed and the causes of both are studied. Using cross-cultural comparisons, students are helped to gain a better understanding of the forces which promote conflict and those that promote accommodation or harmony. The role of textbook and literature materials in promoting or reducing race and ethnic hostility is analyzed through study of both texts and literature.
Components: Lecture
Cross Offerings: ETHNSTDY 3230
GE: Ethnic and Gender, Social Sciences
Prereqs/Coreqs: P: SOCIOLGY 1030

SOCIOLOGY 3330 3 credits
Crime and Delinquency
A survey of the fields of criminology and juvenile delinquency. The course presents a sociological analysis of criminal and delinquent behavior, examines theory and empirical research on the topic, surveys the historical development of the present systems of dealing with criminals and delinquents, and considers current issues regarding crime and delinquency.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: SOCIOLGY 1030

SOCIOLOGY 3430 3 credits
Social Research
A survey of techniques of sociological research, including research design, data collection and data analysis, stress on alternative types of research procedures and their relative strengths and weaknesses.
Components: Lecture
GE: Social Sciences
Prereqs/Coreqs: P: SOCIOLGY 1030 or POLISCI 1130

SOCIOLOGY 3530 3 credits
Rural Sociology
An introduction to the nature and consequences of change in contemporary rural society. Current conditions are placed in a historical context and future directions for agriculture and rural communities are considered. Special attention is paid to socio-economic and environmental impacts resulting from changes in agricultural technology, government policy, population shifts, and changes in the scale of food production. Differing visions regarding the future shape of rural America and the international food system will be considered.
Components: Lecture
GE: Social Sciences
SOCIOLGY 3630 3 credits
Sociology of the Family
The family as a social system with emphasis on culture, group processes, and institutions interacting with the nuclear and alternate types of family.
  Components: Lecture
  GE: Social Sciences
  Prereqs/Coreqs: P: SOCIOLGY 1030

SOCIOLGY 3930 1 - 3 credits
Topics in Sociology
Designed to present to students specialized topics in the field of sociology, for example, the sociology of medicine, the sociology of aging, sociology and the future as shown through science fiction and other futuristic writings, and studies of utopias might be presented depending upon interests of students and competency and interests of staff. Topics to be announced ahead of time and student reaction elicited.
  Components: Lecture

SOCIOLGY 4030 3 credits
Social Organizations
The organizations through which society sustains and perpetuates itself and its members; examination will range from the small group to the bureaucratic structure.
  Components: Lecture
  GE: Social Sciences
  Prereqs/Coreqs: P: SOCIOLGY 1030

SOCIOLGY 4660 1 - 8 credits
Cooperative Field Experience
Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and department.
  Components: Field Studies

SOCIOLGY 4730 1 - 3 credits
Individual Study
Independent study supervised by a staff member; primarily for sociology minors.
  Components: Independent Study

Software Engineering Courses
SOFTWARE 2430 3 credits
Object-Oriented Programming and Data Structures I
An introduction to object-oriented programming. Emphasis on building and testing classes using software engineering techniques. Includes study of a standard class library and use of inheritance and polymorphism for building subclasses and extensibility. Coverage of the stack and queue classical data structures. Discussion of searching, sorting, and hashing techniques. Introduction to linked lists. (Fall, Spring)
  Components: Laboratory, Lecture
  Cross Offerings: COMPUTER 2430
  Prereqs/Coreqs: P: COMPUTER 1430

SOFTWARE 2630 3 credits
Object-Oriented Programming and Data Structures II
Continuation of the object-oriented programming and data structure topics from COMPUTER/SOFTWARE 2430. Coverage of pointers, templates, linked lists, trees, recursion, graphs, and algorithm analysis. Use of software engineering techniques such as inspections, test plans, and configuration management within a group-based project environment. (Fall, Spring)
  Components: Laboratory, Lecture
  Cross Offerings: COMPUTER 2630
  Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2430

SOFTWARE 2730 3 credits
Introduction to Software Engineering
An introduction to software engineering principles, including discussions of development methodologies, requirements analysis, project planning, software design, software construction, software management, software quality, and CASE tools. Students gain experience, via a team project, in the life-cycle development of software systems. (Fall)
  Components: Lecture
  Prereqs/Coreqs: C: SOFTWARE/COMPUTER 2430

SOFTWARE 2950 2 credits
Software Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the college. (Fall, Spring)
  Components: Field Studies
  Prereqs/Coreqs: P: sophomore standing

SOFTWARE 2960 2 credits
Software Engineering Cooperative Education
Work experience in industry under the direction and jurisdiction of the college. (Fall, Spring)
  Components: Field Studies
  Prereqs/Coreqs: P: sophomore standing

SOFTWARE 2970 1 credit
Software Engineering Internship
Work experience in industry under the direction of the Cooperative Education Office of the College of EMS. NOTE: This program is separate and distinct from the Cooperative Education Program and is principally designed to cover the summer vacation period.
  Components: Field Studies
  Prereqs/Coreqs: sophomore standing to enroll in this class

SOFTWARE 3330 3 credits
Intermediate Software Engineering
A more detailed discussion of several software engineering topics included in previous courses including requirements engineering, software modeling, user-interface design, development processes and process improvement. Moderate size GUI-based group project. (Spring)
  Components: Lecture
  Prereqs/Coreqs: P: SOFTWARE 2630 and SOFTWARE 2730
SOFTWARE 3430 3 credits

**Object Oriented Analysis and Design**
Requirements engineering, analysis, and specification using the object-oriented paradigm. Object-oriented architectural and detailed design. Use of an OOA&D modeling language such as UML. Investigation of OOA&D patterns. Moderate size, group project. (Fall)

- Components: Lecture
- Cross Offerings: COMPUTER 3430
- Prereqs/Coreqs: P: SOFTWARE 2730 and COMPUTER/SOFTWARE 2430

SOFTWARE 3730 3 credits

**Software Quality**
Study of the topics related to producing quality software, including software quality assurance, quality metrics, configuration management, verification & validation, reviews, inspections, audits, and software process improvement models. Individual and team projects. (Fall)

- Components: Laboratory, Lecture
- Prereqs/Coreqs: P: SOFTWARE 2630 and SOFTWARE 2730

SOFTWARE 3860 3 credits

**Software Maintenance and Reengineering**
Study of the topics related to maintaining large-scale software systems. Study of software engineering topics such as estimation, software quality assurance, metrics, configuration management, verification & validation, inspections, audits, and team software process as they relate to software maintenance projects. Coverage of traditional analysis and design methods such as structured analysis and design. Two, semester-long, team-based projects: reengineering a small system to be object-oriented and making changes to a moderate-sized existing software project. (Spring)

- Components: Lecture
- Prereqs/Coreqs: P: SOFTWARE 2630 and SOFTWARE 2730

SOFTWARE 3950 2 credits

**Software Engineering Cooperative Education**
Work experience in industry under the direction and jurisdiction of the college. (Fall, Spring)

- Components: Field Studies
- Prereqs/Coreqs: P: junior standing

SOFTWARE 3960 2 credits

**Software Engineering Cooperative Education**
Work experience in industry under the direction and jurisdiction of the college. (Fall, Spring)

- Components: Field Studies
- Prereqs/Coreqs: P: junior standing

SOFTWARE 3970 1 credit

**Software Engineering Internship**
Work experience in industry under the direction of the Cooperative Education Office. NOTE: This program is separate and distinct from the Cooperative Education Program and is principally designed to cover the summer vacation period. (Summer)

- Components: Field Studies
- Prereqs/Coreqs: junior standing to enroll in this course

SOFTWARE 4110 1 credit

**Software Engineering Seminar**
The course consists of lectures/discussions presented by both software engineering faculty and students enrolled in the class. (Spring)

- Components: Seminar
- Prereqs/Coreqs: P: Software Engineering major and junior/senior standing

SOFTWARE 4130 3 credits

**Real-Time Embedded Systems Programming**
An exploration of programming techniques and constructs used to develop reliable software systems capable of responding in real time to environmental changes. An overview of the platforms, tools, and processes used in developing software for embedded systems. Hands-on lab projects experimenting with real-time embedded systems programming details. (Spring)

- Components: Discussion, Laboratory, Lecture
- Prereqs/Coreqs: P: COMPUTER/SOFTWARE 2630 and COMPUTER/SOFTWARE 3430 and (ELECTENG 3780 or COMPUTER 3230)

SOFTWARE 4330 3 credits

**Software Engineering Project I**
Emphasis in applying software engineering knowledge learned in this course and previous courses to a large, team-based, capstone project that spans two semesters. In-depth study of several software engineering topics introduced in earlier courses, such as requirements engineering; analysis and design methods; planning and estimation; project management; and metrics. An introduction to formal methods for specification and design. (Fall)

- Components: Discussion, Laboratory, Lecture
- Prereqs/Coreqs: P: SOFTWARE 3330 and SOFTWARE 3430

SOFTWARE 4730 3 credits

**Software Engineering Project II**
The project started in SOFTWARE 4330 is continued and carried to completion. In-depth study of several software engineering topics introduced in earlier courses, such as software construction tools and issues; unit development, review, testing, and maintenance; software reuse; and metrics. An introduction to current research issues in software engineering. (Spring)

- Components: Discussion, Laboratory, Lecture
- Prereqs/Coreqs: P: SOFTWARE 3730 and SOFTWARE 4330

SOFTWARE 4980 1 - 4 credits

**Current Topics in Software Engineering**
In-depth study of a current topic of interest to the software engineering profession. The topic to be covered will be identified in the course title.

- Components: Lecture

SOFTWARE 4990 1 - 3 credits

**Independent Study**
Advanced study in area of specialization selected by student and approved by faculty member. (Fall, Spring)

- Components: Independent Study
Spanish Courses

SPANISH 1840 4 credits
Elementary Spanish
Grammar, composition, conversation and beginning reading; emphasis upon oral practice and the language laboratory.
Components: Discussion, Laboratory, Lecture

SPANISH 1940 4 credits
Elementary Spanish
Continuation of Spanish 1840; language lab.
Components: Laboratory, Lecture
GE: Humanities-2nd course only
Prereqs/Coreqs: P: SPANISH 1840 or equivalent

SPANISH 2840 4 credits
Intermediate Spanish
Intensive and extensive reading of Spanish and Spanish American novels, plays and short stories; review of grammar; emphasis on oral practice and the language lab.
Components: Laboratory, Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 1940 or equivalent

SPANISH 2940 4 credits
Intermediate Spanish
Continuation of Spanish 2840; language lab.
Components: Laboratory, Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 2840 or equivalent

SPANISH 3000 1 - 4 credits
Foreign Languages Travel Abroad Seminar
A seminar with emphasis on language, literature and culture. Non-language students may take this course in English translation for credit in humanities but receive no foreign language credit. Students receive credits in Spanish or in literature translation for non-language students. Number of credits depends on duration of exposure, amount of reading, and quality of written work.
Components: Seminar
GE: Humanities, International Education
Prereqs/Coreqs: P: SPANISH 2840 or equivalent. Non-language students should consult the department chairperson

SPANISH 3820 2 credits
Spanish Conversation and Composition I
This course stresses basic Spanish conversation as reflected in readings in the humanities (short stories, essays, social and cultural portrayals of the Hispanic world, etc.) and in real-life situations.
Components: Lecture
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

SPANISH 3830 3 credits
Spanish Civilization
The political, social, intellectual, artistic and literary development of the Spanish nation from its origin to the present.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

SPANISH 3840 1 - 3 credits
Topics in Hispanic Literature and Culture
Specific topics dealing with aspects of Hispanic literature or culture will be presented along thematic lines. This course presents themes from various literary movements (Renaissance, Baroque, Neoclassical, Romantic, Modernist and Contemporary). These topics cover a broad spectrum ranging from the Middle Ages in Spain to present trends in Spanish America.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 2940 or equivalent. Due to the thematic nature of this course, it may be taken more than once for credit, provided the content is different

SPANISH 3850 3 credits
Spanish American Literature and Culture I
An examination of representative texts from various Spanish American regions, covering the pre-Columbian period through the end of the 19th century (Spanish American modernismo).
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

SPANISH 3860 3 credits
Spanish American Literature and Culture II
An examination of representative texts from various Spanish American regions, covering the 20th century. There will be an emphasis on the major literary and cultural movements and the historical context which helps us to understand them.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

SPANISH 3920 2 credits
Spanish Conversation and Composition II
This course stresses basic Spanish conversation as reflected in readings in the humanities (short stories, essays, social and cultural portrayals of the Hispanic world, etc.) and in real-life situations.
Components: Lecture
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

SPANISH 4620 2 credits
Cervantes
The life and times of Cervantes, his exemplary novels and Don Quixote.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

SPANISH 4720 2 credits
Spanish Literature of the 20th Century
Contemporary masterpieces in the novel, drama, poetry and essay; lectures, discussion, exercises in translation and interpretation.
Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 2940 or equivalent
SPANISH 4820 2 credits

**Phonetics**
The theory of the pattern of sounds in Spanish with practical training in pronunciation. Required for a major or teaching minor in Spanish.

Components: Lecture
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

SPANISH 4830 3 credits

**Introduction to Spanish Literature**
Reading of selected masterpieces of Spanish literature.

Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

SPANISH 4850 1 - 4 credits

**Supervised Independent Study**
For advanced students who wish to acquaint themselves further with Spanish literature, civilization or linguistics; thesis type report and examination; by special permission--number of credits to be determined at the beginning of the course.

Components: Independent Study
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

SPANISH 4930 3 credits

**Introduction to Spanish Literature**
Continuation of Spanish 4830.

Components: Lecture
GE: Humanities
Prereqs/Coreqs: P: SPANISH 2940 or equivalent

Speech Courses

SPEECH 1010 2 credits

**Public Speaking**
Students learn the fundamental theories and concepts of public communication and practice researching topics, organizing material, and presenting speeches with accompanying appropriate and natural nonverbal communication.

Components: Lecture
GE: Speech

SPEECH 1250 3 credits

**Professional Speaking**
Students learn public speaking theory and concepts of communication in the professional setting. Through major-related assignments they practice audience analysis, topic research, organization, delivery, and evaluation of public presentations. This course includes a special emphasis on technology enhanced presentations

Components: Lecture
GE: Speech

SPEECH 2010 3 credits

**Speech Communication for Teachers**
This course focuses on all facets of speech communication vital to teachers in the classroom. Student activities include simulated instructional presentations.

Components: Lecture
GE: Speech

SPEECH 2250 3 credits

**Communication and Leadership in Small Groups**
Students study contemporary theories and concepts surrounding communication in small groups. Students lead, participate in, and observe small group activities such as project planning, decision making, and task completion.

Components: Lecture
GE: Speech

SPEECH 2300 3 credits

**Introduction to Intercultural Communication**
Students study the theory and practice of intercultural communication. The primary objective of the course is to understand how culture effects communication.

Components: Lecture
GE: International Education

SPEECH 2500 1 - 3 credits

**Topics in Speech**
In depth study of topics of interest in speech communication. The topic to be studied will be identified in the course title.

Components: Lecture

SPEECH 3010 1 credit

**Directed Studies in Forensics**
Students apply effective oral communication skills by participating in the forensics program as competitive speakers, as tournament managers, and as tournament judges.

Components: Independent Study

SPEECH 3250 3 credits

**Interpersonal Communication**
The study of human communication and relationships. Contemporary theories and basic concepts concerning interpersonal communication are covered with an emphasis on dyadic communication.

Components: Lecture
GE: Social Sciences, Speech

SPEECH 3500 3 credits

**Persuasion and Argumentation**
Students are taught to critically evaluate, write, and orally present persuasive messages. Contemporary theories of persuasion are covered. Students end the semester by preparing and participating in a formal debate.

Components: Lecture
Prereqs/Coreqs: P: SPEECH 1010

SPEECH 3990 3 credits

**Teaching Methods in Speech Communication**
Students learn curriculum, test & measurement, setting course objectives, and setting course structure for drama, speech, debate, and other speech related courses and activities.

Components: Lecture
SPEECH 4010 3 credits
Public Address and Speech Writing
Students study great speeches and speakers primarily of the 20th Century while learning to write and deliver polished presentations for various occasions. Students will learn to write speeches for themselves and for another speaker. Topics covered will include: audience analysis, appropriate content; language style; nonverbal delivery.
Components: Lecture
Prereqs/Coreqs: P: SPEECH 1010

SPEECH 4020 3 credits
History and Theory of Rhetoric
This course is designed for students who will use and/or teach rhetoric strategies and structures in the professional world. From speech and communication theory to the teaching of critical and interpretational writing and reading, the study of rhetoric’s place in the history of ideas will help students to understand the place and power of language in the university and the professional work place. (Occasionally)
Components: Lecture
Cross Offerings: ENGLISH 4020
GE: Humanities-2nd course only
Prereqs/Coreqs: P: ENGLISH 1130 and ENGLISH 1230

SPEECH 4250 3 credits
Senior Seminar
Students participate in a seminar on selected topics in the field of speech communication.
Components: Seminar

SPEECH 4500 3 credits
Communication Theory
Students learn to build their own theory of communication while studying the major schools of thought about theory, knowledge, and being as well as major theories concerning communication in a variety of contexts.
Components: Lecture

SPEECH 4990 1 - 3 credits
Independent Study
Under the direction of a faculty member, the student completes study and assignments covering a specific speech-related subject, not offered in regularly scheduled courses.
Components: Independent Study

Teacher Education Courses

TEACHING 1010 2 credits
Mentoring the Young Adolescent
Designed to help high school seniors decide if they would like to enter the field of teaching, particularly in the developmental stage known as the young adolescent (10-14 years of age). Further, this course is designed to help these high school students begin to develop the knowledge, skills and dispositions necessary to become teachers of young adolescents.
Components: Lecture

TEACHING 1230 2 credits
Introduction to Education
An introduction to the broad fields of teaching; objectives and principles of education; an exploration of teaching as a career choice (including elementary, middle, and high school teaching). (Field experience: 20 hours)
Components: Lecture

TEACHING 2010 1 credit
Computer Applications in Education
An introduction to the use of computers in the classroom.
Components: Lecture

TEACHING 2020 1 credit
Middle Level Exploratory I
The seminars are designed to acquaint the student with the field of middle level education and with the education of young adolescents. The seminars will also assist the student in understanding the 10-14 licensure program.
Components: Lecture

TEACHING 2030 1 credit
Middle Level Exploratory II
The seminars are designed to acquaint the student with the field of middle level education and with the education of young adolescents. The seminars will also assist the student in understanding the 10-14 licensure program.
Components: Lecture

TEACHING 2040 1 credit
Electronic Portfolio
Designed to teach the student how to develop, design and utilize an electronic portfolio through all levels of mastery.
Components: Lecture

TEACHING 2130 3 credits
Human Growth and Development
A general introduction to the developing child from infancy through adolescence. Individual students will focus on the developmental level of specific relevance to their future educational career. The physical, social, emotional, and cognitive areas of development will be reviewed in detail. Developmental research findings, individual differences, and the child’s development as a member of society and culture will be highlighted. The implication of human development for education and other work with children and youth will be an important focus of the course.
Components: Discussion, Lecture

TEACHING 2210 3 credits
Foundations of Early Childhood Education
An overview of the field of early childhood education, including history, child development theory, program models and professional opportunities. Guided observation at the preschool level. The role of families and parent involvement is a component of this course. The School of Education conceptual design as it applies to early childhood education is explored. (Field experience: 10 hours.)
Components: Laboratory, Lecture
TEACHING 3040 4 credits
Reading, Literacy, and Literature I
Focus on beginning reading techniques, innovations and approaches to reading, phonics, and other decoding strategies in primary school; planning and teaching reading lessons; assessing success in reading; examining the historical value of literature for children; integrating literature into the reading program; laboratory experiences in elementary classrooms.
Components: Laboratory, Lecture
Prereqs/Coreqs: C: TEACHING 3130 and TEACHING 3240 and TEACHING 3730 and TEACHING 4420

TEACHING 3110 2 credits
Key Concepts of Middle Level Education
This course is intended to provide students with an introductory understanding of the philosophy and organization of middle level education. Emphasis is directed toward programmatic considerations.
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education and TEACHING 1230; C: TEACHING 3120

TEACHING 3120 2 credits
Characteristics of Transescents
This course focuses on the physical, intellectual, emotional and social development of young adolescents.
Components: Lecture
Prereqs/Coreqs: P: TEACHING 1230; C: TEACHING 3110

TEACHING 3130 3 credits
K-4 Methods for Cognitive Development
Teaching strategies and classroom management techniques appropriate for kindergarten and the primary grades. (Laboratory/Field experience)
Components: Lecture
Prereqs/Coreqs: C: TEACHING 3040 and TEACHING 3240 and TEACHING 3730 and TEACHING 4420

TEACHING 3230 3 credits
Teaching Science at the Middle and Secondary Schools
Methods, procedures and materials for science curriculum and instruction in the middle and secondary school. The School of Education knowledge base as it applies to science instruction is explored. Required of majors and minors in the natural sciences. (Field experience: 30 hours)
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education

TEACHING 3240 3 credits
Pre-K Methods for Cognitive Development
Theory of cognitive development of infants, toddlers and preschool children. Age-appropriate activities in the areas of health, math, science, social studies, ethnic studies, environmental education and creative thinking for preschool level. (Laboratory/Field experience)
Components: Lecture
Prereqs/Coreqs: C: TEACHING 3040 and TEACHING 3130 and TEACHING 3730 and TEACHING 4420

TEACHING 3320 3 credits
Psychology of Learning Encompassing the Exceptional Child
This course will expose students to several theories that impact the teaching and the learning process with a focus on the learner with exceptional learning needs. (Field experience: 15 hours)
Components: Discussion, Lecture
Prereqs/Coreqs: P: TEACHING 2130 or PSYCHLGY 3130 or PSYCHLGY 3230 and TEACHING 1230 or PHYSED 2320 or consent of instructor

TEACHING 3530 3 credits
Teaching History and Social Studies at the Middle and Secondary Schools
A study of the goals, skills, issues, materials and the role of history and social studies instruction in middle and high schools. The School of Education knowledge base as it applies to history and social studies instruction is explored. (Field experience: 30 hours)
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education

TEACHING 3630 3 credits
Ethnic and Gender Equity in Education
To increase an appreciation, understanding, and awareness of ethnic and gender equity issues in the educational process and in society. The student will view equity issues through research, historical, philosophical, sociological, and psychological perspectives and the implications that each arena has on the lives of all of us. (Field experience 25 hours)
Components: Discussion, Lecture
Cross Offerings: ETHNSTDY 3630, WOMSTD 3630
GE: Ethnic and Gender

TEACHING 3640 3 credits
Creative Development in Early Childhood
Theories and techniques for the enhancement of creative expression in young children. Age-appropriate activities in the areas of art, music, movement and dramatic play.
Components: Lecture

TEACHING 3730 4 credits
Guidance, Assessment and Instruction in Early Childhood
Guidance, social-emotional adjustment, developmental assessment, effective teaching strategies, classroom management techniques, and continuity of learning experiences. Review and critique of authentic and standardized assessment instruments for both formative and summative evaluation and report to parents. (Field experience: 12 hours of observation-developmental assessment.)
Components: Laboratory, Lecture
Prereqs/Coreqs: C: TEACHING 3040 and TEACHING 3130 and TEACHING 3240 and TEACHING 4420

TEACHING 3840 4 credits
Developmental Reading and Language Arts in Content Areas for the Middle/Secondary Grades
The purpose of this course is to promote the understanding of reading instruction and to assist teacher candidates in their competence in developing effective reading and language arts skills and habits in their students, especially in the content fields, in middle and high school. Required for early adolescence/adolescence teacher candidates.
Components: Lecture
TEACHING 4020 2 credits
Educational Media Technology
Audio and visual materials that make up the field of educational media; laboratory activities for use, design and development of instructional media; interrelationship of communication theory; selection, utilization and production of materials, microcomputer applications and the operation of equipment.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: TEACHING 2010

TEACHING 4030 3 credits
Management for Children with Disabilities (CWD)
This course is designed to increase awareness and ability to implement various behavior management strategies with children with Specific Learning Disabilities (SLD) and with children with Emotional Behavioral Disabilities (EBD). Within this awareness, teachers will be able to prepare and implement an effective behavior management plan that will assist students in school, home and community. This class will present the spectrum of intervention and social skill strategies, motivational techniques along with guidelines for their use with children, transescents, and adolescents with SLD and EBD.
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education

TEACHING 4040 4 credits
Reading, Literacy and Literature II
Reading processes, expanding word recognition strategies, comprehension, reading rates, vocabulary, reading interests, selection and use of reading materials, evaluation of the reading progress, laboratory experiences with children, integrating literature into middle childhood.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: TEACHING 3040

TEACHING 4050 18 credits
Middle Level Professional Semester
This course is designed for students seeking certification to teach at the middle level. Through this course, students will develop, practice, refine, and demonstrate the knowledge, skills, and dispositions needed to become excellent middle level teachers. The course will address methods of teaching that are specific to the core content areas of language arts, mathematics, science, and social studies, as well as more general teaching methods appropriate for use at the middle level. The course will include a study of the physical, intellectual, emotional, social, and moral development of young adolescents. Educational philosophies and theories of learning will be discussed, and students will become proficient in the use of various assessment and evaluation strategies and in the use of technology in the classroom. A field experience in a middle school is included in this course.
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education

TEACHING 4060 3 credits
Teaching World Languages: Theory and Practice
Designed to prepare future teachers of French, German, and Spanish for successful careers. This course blends the theory of second language acquisition with the practice of teaching according to the State Standards.
Components: Lecture

TEACHING 4070 2 credits
Post Student Teaching Seminar
This course is designed as a capstone course for pre-service teachers who are completing the middle level education 10-14 (early adolescence) licensure program. Throughout this course, pre-service teachers will develop, practice, refine, and demonstrate the knowledge, skills, and dispositions needed to become excellent middle level teachers. Students will complete their licensure/level III portfolios that are required for licensure and program graduation. The course will reflect on the methods of teaching that pre-service teachers drew from their experiences of student teaching. The course will use practical experiences to put into context the developmental natures of early adolescent learners and how those nature impact classroom practices. Educational philosophies and theories of learning will be discussed.
Components: Seminar

TEACHING 4090 4 credits
Integrated Methods: Language Arts and Social Studies
This course focuses on connections of content, methods, and developmental needs of early childhood/elementary language arts and social studies.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: admission to the School of Education; C: Teaching 4140

TEACHING 4120 2 credits
Pre-Student Teaching and Seminar in an Inclusionary Environment
Observation of children/youth in learning situations, participation in learning activities of the classroom, teaching several lessons, and evaluation of teaching-learning experiences in an CWD environment. Required of students working towards a special education/inclusion minor.
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education

TEACHING 4140 4 credits
Teaching Mathematics and Science in Early Childhood and Elementary Settings
This course addresses standards, methods, theories, and materials related to teaching mathematics and science in early childhood and elementary settings.
Components: Laboratory, Lecture
Prereqs/Coreqs: P: a “C” or better in MATH 3030 and admission to the School of Education. C: Teaching 4140

TEACHING 4150 3 credits
Assessing Children with Disabilities (CWD)
A survey of psychological testing with emphasis on the evaluation, administration, interpretation, and statistical analysis of the results of psychological testing devices and techniques.
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education
Transitions for Children with Disabilities (CWD)
This course is designed to help teachers acquire knowledge and develop skills and strategies that will help them make school learning more relevant to life outside of and after K-12 school. Students will study and evaluate developmental career and vocational education, transition, and education for employment programs and approaches. Course emphasis is on development of educational approaches and programs for students with exceptional educational needs.

Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education

Pre-Student Teaching at Middle/Secondary Level
Observations of youth in learning situations, participation in the learning activities of the classroom, teaching several lessons, and evaluation of teaching-learning experiences. Required of students who are preparing to teach 10-21, middle/secondary, or B-21 special subject majors. Students should take this course concurrently with the appropriate methods. (Field experience: 40 hours per credit)

Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education

Advising, Interaction and Communication
This course focuses on the classroom counseling skills required of middle school teachers to include listening, group dynamics, encouragement and non-verbal communication. The emphasis of the course will be on group guidance activities in the classroom setting.

Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education; TEACHING 3110 and TEACHING 3120; C: TEACHING 4620

Student Teaching - Early Childhood

Components: Field Studies
Prereqs/Coreqs: P: admission to the School of Education

Senior Seminar
This course provides a balanced view of the sociological, philosophical, and ethical forces affecting early childhood/middle childhood education in America. Students will re-model lesson plans with critical thinking strategies and reflect on prior experiences in schools in order to form judgments about ethical teaching behavior.

Components: Laboratory, Seminar
Prereqs/Coreqs: P: TEACHING 3130 and TEACHING 3240 and TEACHING 3040 and TEACHING 3730 and TEACHING 4420

Student Teaching B-11 Kindergarten

Components: Field Studies
Prereqs/Coreqs: P: TEACHING 3040 and TEACHING 3130 and TEACHING 3240 and TEACHING 3730 and TEACHING 4420 C: TEACHING 4360 and TEACHING 4990

Issues in ELL Education
This course addresses the social, political, and cultural context in which language learning takes place and examines those issues that are relevant in language acquisition. Themes, such as immigration and diversity in the United States, language policies, history of bilingual education, English-only movement, English language learners and disability will be analyzed in this course. (Summer)

Components: Lecture

Second Language Acquisition in the K-12 Classroom
This course examines theories of second language acquisition, and practical application of theories to second language teaching and learning. The course provides a comprehensive interdisciplinary survey of theory and practice through the application of research in linguistics, psychology, education, and sociology into second language acquisition. (Summer)

Components: Lecture

Methods and Assessment of Teaching English Language Learners
This course is designed to examine methods and assessment of teaching English language learners. The course stresses a comprehensive understanding of the history of first and second language teaching methods from the past to the present, including knowledge of the traditional, contemporary, and innovative methods and approaches in the teaching of English language learners. Practical pedagogical principles of teaching English to speakers of other languages with regard to language skills, language system, and related assessment and cultural implications are included. (Summer)

Components: Lecture

ELL Practicum
This course is designed for students who successfully completed the courses Issues in ELL Education, Second Language Acquisition Theories, and Methods and Assessment of Teaching English Language Learners. It provides opportunities for teachers to reflect on their practice in light of theories of SLA and ELL teaching methods and assessment. The course provides for teachers a platform to critically evaluate their teaching skills and make improvements justified by current research literature. Throughout the practicum, students deepen their understanding in the ELL/SLA field by reading and researching English language learners-related professional articles. (Fall)

Components: Lecture

Administration and Family Relations in Early Childhood
Development of managerial and leadership roles, knowledge of requirements for licensure and licensing, effective communication with staff and parents, community relations, and advocacy.

Components: Lecture
Prereqs/Coreqs: P: TEACHING 2210
TEACHING 4350 3 credits
Field Experience in Cultural Diversity
This course provides the opportunity for students to gain in-depth first-hand knowledge of the cultural background of English language learners. Particular attention will be given to techniques that encourage and secure parental involvement. Positive effects of special programs for ELLs will also be emphasized in this course.
Components: Lecture
Prereqs/Coreqs: P: TEACHING 4270 and TEACHING 4280 and TEACHING 4290

TEACHING 4360 6 credits
Student Teaching Elementary
Components: Field Studies
Prereqs/Coreqs: C: TEACHING 4260 and TEACHING 4990

TEACHING 4380 2 credits
Intercultural Communication for Teachers of English Language Learners
In this course, we will examine the impact that culture has on verbal and non-verbal communication. Participants will consider the nature of cultural patterns. They will learn to better interpret the behaviors they observe in their classrooms and in the public schools in general. The overall goal of the course is for participants to become competent in their intercultural interactions with students, parents, and colleagues in the K-12 setting.
Components: Lecture

TEACHING 4420 3 credits
Oral Language and Emergent Literacy
The development of communication, acquisition of language, development of phonology, structure of language, dialect variations, how language is acquired, assessment of language and communication skills, and classroom approaches to oral language development. (Laboratory/Field experience)
Components: Lecture
Prereqs/Coreqs: P: TEACHING 2210 or TEACHING 1230; C: TEACHING 3040 and TEACHING 3130 and TEACHING 3240 and TEACHING 3730

TEACHING 4460 6 - 12 credits
Student Teaching 10-14
Components: Field Studies
Prereqs/Coreqs: P: TEACHING 4050 or TEACHING 4220; C: TEACHING 4990

TEACHING 4530 1 - 3 credits
Current Topics in Education
Study of a selected topic determined by an identified need. For example: current issues, ideas and topics of interest to a particular group of teachers.
Components: Lecture

TEACHING 4620 2 credits
Teaching Transescents
This course provides an overview of the curricular and instructional practices appropriate for the young adolescent learner. Issues, trends and research relevant to effective middle level practices will be discussed.
Components: Lecture
Prereqs/Coreqs: P: admission to the School of Education and TEACHING 3110 and TEACHING 3120; C: TEACHING 4220

TEACHING 4630 3 credits
Learning and Language Disorders
Course will review pre-kindergarten/kindergarten through young adult development and identification with children with disabilities (CWD); emphasize diagnosis and remediation of learning disorders through a special education approach with emphasis on inclusion model; study of appropriate learning environments.
Components: Lecture
Prereqs/Coreqs: P: junior standing or consent of instructor

TEACHING 4660 6 - 12 credits
Student Teaching B-21
Components: Field Studies
Prereqs/Coreqs: P: TEACHING 4210 or PHYSED 4530; C: TEACHING 4990

TEACHING 4710 1 - 3 credits
Independent Study in Education
Supervised individual study of a topic selected by the student with staff approval.
Components: Independent Study

TEACHING 4730 2 credits
Working with Families of Children with Disabilities (CWD)
Course enables teachers and other professionals to provide parents and other family members with knowledge and skills to become full partners in the educational process by learning advocacy techniques. Professionals need more information relative to parent’s needs and participation. Identification of needs and concerns of family members of persons with disabilities should lead to design of programs that facilitate family participation in all phases of schooling process. Teachers and parents working together should lead to more effective outcomes for students with disabilities as they go through school and prepare to live, work and recreate in the community as adults.
Components: Lecture

TEACHING 4760 12 credits
Internship in Teaching
This course is designed for those teacher education candidates who have been hired as intern teachers by school districts to fulfill the Department of Public Instruction required student teaching practicum. As part of this course, the teacher candidate will complete the professional teacher education graduation portfolio.
Components: Field Studies
Prereqs/Coreqs: P: TEACHING 4120 or TEACHING 4050 or TEACHING 4210 or (TEACHING 3040 and TEACHING 3130 and TEACHING 3240 and TEACHING 3730 and TEACHING 4420); C: TEACHING 4990
**Theater Courses**

**THEATER 1130 3 credits**  
*Introduction to the Theater*  
A survey of the elements of the theater; units on dramatic literature, history of the theater, dramatic theory and criticism, and technical theater.  
Components: Lecture  
GE: Fine Arts

**THEATER 1230 3 credits**  
*Technical Theater I: Stagecraft*  
The basic principles and techniques of set construction, scene design and lighting are studied and practiced in production situations.  
Components: Laboratory, Lecture

**THEATER 1430 3 credits**  
*Oral Interpretation of Literature*  
Theory and practice of the oral communication of the major prose and poetic forms of literature.  
Components: Lecture

**THEATER 1930 3 credits**  
*Voice and Diction*  
The study of the speaking voice; vocalization, articulation and pronunciation of language. Emphasis upon actor training and individual improvement.  
Components: Lecture

**THEATER 2130 3 credits**  
*Play Reading and Analysis*  
An introduction to the contemporary repertoire and play analysis from both the literary and theatrical standpoints: form, style, plot structure, character, theme, and staging requirements. Representative works from the modern theater will be read and analyzed in lecture and small group discussion.  
Components: Lecture

**THEATER 2220 3 credits**  
*Play Production*  
Costuming, makeup and business organization, particularly geared toward educational theater. Through lecture, readings and laboratories, the history and construction of costumes, basic types of makeup and prosthetics, and business organization including public relations are studied.  
Components: Lecture

**THEATER 2230 3 credits**  
*Technical Theater II: Lighting*  
Application of lighting design to the stage and natural environment; color principles, lighting instruments and control equipment. Production participation and labs.  
Components: Lecture

**THEATER 2450 1 - 3 credits**  
*Topics in Theater*  
In depth study of topics of interest in theater. The topics to be studied will be identified in the course title.  
Components: Lecture

**THEATER 2730 3 credits**  
*Acting I: Elements of Acting*  
The physical, vocal and interpretive aspects and elements of acting. Improvisatory exercises and rehearsal and performance of scenes from modern plays.  
Components: Lecture

**THEATER 2830 3 credits**  
*Acting II: Advanced Scene Work*  
Advanced scene work for the actor. Emphasis will be placed on character analysis, identifying scene objectives, playing intentions, relationships with other characters, and developing a physical and vocal characterization. Scenes will be chosen primarily from plays by Ibsen, Chekhov, Strindberg, and Shaw.  
Components: Lecture  
Prereqs/Coreqs: P: THEATER 2730 or consent of instructor

**THEATER 2900 3 credits**  
*Dance for Music Theater*  
A dance workshop class for learning several styles of dance found in the American musical tradition. Basic elements of choreography for musicals from solo to large group dance numbers.  
Components: Lecture

**THEATER 2950 3 credits**  
*Movement for Theater*  
A basic and in-depth exploration of the fundamentals of movement and body awareness which is necessary for acting in theater. Including basic dance, and mime to state combat, juggling and slap-stick comedy.  
Components: Lecture

**THEATER 3220 2 credits**  
*Teaching Methods in Theater and Drama*  
Methods, procedures and instructional materials for the high school curricular and cocurricular theater and drama program.  
Components: Lecture
THEATER 3250 3 credits
**Technical Theater III: Scenic Design**
An introduction to the world of scenic design for the theater. Basic skills of drafting and rendering are learned and artistic expression is cultivated.
Components: Lecture

THEATER 3330 3 credits
**Play Direction**
The basic principles and techniques of play direction, including the choice of play, the rehearsal schedule, the analysis of the play, interpretation, blocking, and directing the actors are examined through lecture and practical exercises.
Components: Lecture

THEATER 3400 3 credits
**Drafting for the Theater**
Introduction and study of mechanical drafting techniques used in theater.
Components: Lecture

THEATER 3450 1 - 3 credits
**Directed Studies in Theater**
Supervised participation in writing, production, directing or acting in a theatrical production.
Components: Independent Study

THEATER 3920 3 credits
**Acting III: Style Acting**
The theory and practice of acting in plays from the classical theater with a special emphasis upon Shakespearean drama.
Components: Lecture
Prereqs/Coreqs: P: THEATER 2730 and THEATER 2830 or consent of instructor

THEATER 4220 3 credits
**Recent and Contemporary Drama**
Social, intellectual and scientific forces characteristic of recent times as reflected through the medium of drama. Plays written by European, British and American writers will be read.
Components: Lecture
GE: Fine Arts

THEATER 4530 1 - 3 credits
**Independent Study**
Independent pursuit of a creative project designed by the student and supervised by a staff member.
Components: Independent Study

THEATER 4630 3 credits
**History of Theater and Drama**
A general survey of the rise and development of the theater and drama from Egypt to Shakespeare.
Components: Lecture
GE: Fine Arts

THEATER 4660 1 - 8 credits
**Cooperative Field Experience**
Enhancement of the educational experience through placement of a student with a cooperative agency, business, industry or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and department.
Components: Independent Study

THEATER 4730 3 credits
**History of Theater**
A continuation of Theater 4630. A general survey of the rise and development of the theater and drama from Moliere to Ibsen.
Components: Lecture
GE: Fine Arts

THEATER 4830 3 credits
**Seminar in Theater**
A critical examination of one area within the theater field, the specific subject to be determined by the instructor, the needs of the students and the current problems in the field. This is an elective course and is not repeatable.
Components: Lecture
Prereqs/Coreqs: P: junior or senior standing

THEATER 4930 3 credits
**Studio Production**
Individual student production and direction of dramatic scripts.
Components: Independent Study
Prereqs/Coreqs: P: THEATER 1230 and THEATER 3330 and junior standing

### UWP Study Courses

UWPSTUDY 3000 1 - 3 credits
**Short Term International Experience**
Short-term (less than full semester) educational experience abroad. Open to any student who meets the prereqs/coreqs (if any) as determined by the sponsoring program, department, or school in the College of Liberal Arts & Education. May be used to fulfill the general education requirement in international education; if taken for less than 3 credits, other credits from the approved list of courses in international education are required in order to fulfill the 3-credit general education requirement.
Components: Lecture
GE: International Education

UWPSTUDY 4800 1 - 8 credits
**Interdisciplinary Special Topics**
This course will focus on interdisciplinary topics. The course is to contain curriculum content from at least two disciplines (majors). The topic(s) covered will be identified in the course title. A syllabus, grading rubrics, textbooks, and assessment measures will be available during the preregistration process.
Components: Lecture
Women’s Studies Courses

WOMSTD 1130  3 credits
Introduction to Women’s Studies
Introduction to major issues related to women through an interdisciplinary examination of the images of women in such areas as philosophy, history, literature, psychology and sociology. A primary focus is on 20th century American trends in such institutions as the family, education, law, politics and economics.
Lecture
Gender Studies, Humanities or Social Science

WOMSTD 2230  3 credits
Women, Sex Roles and Society
An investigation of the status of women and how women live their lives in relationship to each other and to men. The course examines women’s current conditions in the United States, alternative conditions in other times and places, and the prospects for change. Different attempts to explain those conditions and relationships are examined.
Lecture
SOCIOLOGY 2230
Gender Studies, Social Sciences

WOMSTD 2430  3 credits
Women and Health
This course provides a comprehensive view of women’s health through a wide variety of experiences and activities, focusing on the various aspects of wellness, mental health, reproductive health issues, and the aging process.
Lecture
Gender Studies, Physical Education-Wellness

WOMSTD 2530  3 credits
Psychology of Women
Explores the shaping of women’s behaviors and self-concepts by biological and social influences. Also covers the empirical support for and against gender-related differences in behavior and thought patterns.
Lecture
PSYCHOLGY 2530
Gender Studies, Social Sciences
P: PSYCHOLGY 1130 or one course in women’s studies

WOMSTD 2730  3 credits
Women in Science and Engineering
This course deals with the issues which confront women in science-related professions. An examination of the skills and talents needed to succeed is accomplished through study of both women in history and current professionals.
Lecture
Gender Studies, Social Sciences

WOMSTD 2830  3 credits
Survey of Women Writers
Survey of women writers in the English language with a focus on the themes, issues, and concerns that tie women’s writing together and create a ‘women’s literary tradition.’ British, American, and international writers are included. (Fall)
Lecture
ENGLISH 2830
Gender Studies, Humanities
P: ENGLISH 1130 and ENGLISH 1230

WOMSTD 2930  3 credits
Minority Women Writers of the United States
Literature written by Native-American women, African-American women, Latina-American women, and Asian-American women. Includes investigation of historical and cultural backgrounds as well as literary traditions of minority women of the United States. Students will read authors such as Alice Walker, Toni Morrison, Maya Angelou, Maxine Hong Kingston, Sandra Cisneros, Louise Erdrich, Leslie Marmon Silko, and others. (Fall, Spring)
Lecture
ENGLISH 2930, ETHNSTDY 2930
Ethnic and Gender, Humanities
P: ENGLISH 1130 and ENGLISH 1230

WOMSTD 3170  3 credits
Space, Place, and Gender
An introduction to gender and geography. The role of gender in the study of geography, which is concerned with places, linkages, patterns of flow, locations, landscape, and the social/political/economic production of space.
Discussion, Lecture
GEOGRAPHY 3170
Gender Studies, Social Sciences

WOMSTD 3330  3 credits
Topics in Women's Studies
Selected topics in women's studies. The specific topic will vary each semester and will be announced in the class schedule. May be repeated for credit under different topic headings.
Lecture
Gender Studies
P: three credits in women studies

WOMSTD 3340  3 credits
Management, Gender & Race
This course reviews the changing nature of management and explains why gender and race/ethnicity have become important concerns of business. It examines the status of women and people of color in managerial or administrative positions and discusses socialization processes, stereotypes, equal employment opportunity laws, diversity management, illegal harassment, and power in organizations. Networking, mentoring, work/life balance, and career planning also are addressed.
Lecture
BUSADMIN 3340, ETHNSTDY 3340
Ethnic and Gender
P: BUSADMIN 2330 or AGINDUS 1500 or junior standing
WOMSTD 3430  3 credits
**Women and the Arts**
The focus is on the contributions of women in the areas of theatre, dance, music, film, and the visual arts. In addition to classroom participation, the course includes attendance at live performances and presentations by guest lecturers.

- Lecture
  - Fine Arts, Gender Studies

WOMSTD 3520  3 credits
**American Women's History**
Surveys the changing patterns of domestic and family life, work, education and public participation of American women from the Colonial period to the present.

- Lecture
  - HISTORY 3520
  - Gender Studies, Historical Perspective
  - P: HISTORY 1330 or HISTORY 1430 or consent of instructor or department chair

WOMSTD 3530  3 credits
**Philosophy's Feminist Future: From Powerism to Personalism**
With a focus on major representatives of philosophical thought, this course will examine ideas which have promoted civilization along sexist lines and other ideas which can contribute to the development of a new kind of civilization rooted in a respect for persons. (Every other Spring)

- Lecture
  - PHILSPHY 3530
  - Gender Studies, Humanities
  - P: three credits in philosophy or WOMSTD 1130 or consent of instructor

WOMSTD 3630  3 credits
**Ethnic and Gender Equity in Education**
To increase an appreciation, understanding, and awareness of ethnic and gender equity issues in the educational process and in society. The student will view equity issues through research, historical, philosophical, sociological, and psychological perspectives and the implications that each arena has on the lives of all of us. (Field experience 25 hours)

- Discussion, Lecture
  - TEACHING 3630, ETHNSTDY 3630
  - Ethnic and Gender

WOMSTD 3700  3 credits
**Women in European Civilization**
Covers actions of, and attitudes towards, women in ancient Greece and Rome, the Middle Ages, the Reformation, the Enlightenment, the French Revolution, the 19th century, and the two modern wars. Analyzes women in context of family life, work life, education, and social movements.

- Lecture
  - HISTORY 3700
  - Gender Studies, Historical Perspective
  - P: HISTORY 1010 or HISTORY 1020 or consent of instructor or department chair

WOMSTD 3730  3 credits
**Women and the Law**
A study of women in their legal roles as wives and mothers, workers and students, criminals and victims of crime. The course examines how the law affects women's personal choices regarding marriage, having children, and aiming for high-level achievements in education and in work. The course also examines ways in which law affects women in poverty and in old age.

- Lecture
  - CRIMLJUS 3730
  - Gender Studies, Social Sciences
  - P: CRIMLJUS 1130 or one course in women's studies and junior standing

WOMSTD 3830  3 credits
**Black Women and Feminism in the U.S.**
An interdisciplinary examination of the historical and contemporary relationship between black women in the United States and the feminist movement. Authors discussed may include Frances Harper, Ida Wells-Barnett, bell hooks, and Audre Lorde, and others.

- Lecture
  - ETHNSTDY 3830
  - Ethnic and Gender
  - Sophomore standing to enroll in this class

WOMSTD 4500  3 credits
**Women and Mythology: Goddess, Witch, Sibyl**
This course takes a comparative and interdisciplinary approach to numinous images of the feminine as they appear internationally. By exploring pre-historical, historical, and contemporary manifestations of goddess-centered mythology and religious practices around the world, students will broaden their understanding of women's contributions to the literary and spiritual traditions of many cultures. (Every other Fall)

- Lecture
  - ENGLISH 4500
  - Gender Studies, Humanities, International Education
  - P: ENGLISH 1130 and ENGLISH 1230

WOMSTD 4660  3 credits
**Cooperative Field Experience**
Enhancement of the educational experience through placement of a student with a cooperating agency, business, industry or institution. The nature of the assignment, type of experience, number of credits and evaluation procedure to be stipulated in a statement of agreement (learning contract) between the student and department.

- Field Studies
  - P: WOMSTD 1130 and junior standing

WOMSTD 4730  3 credits
**Individual Research in Women's Studies**
Advanced work on a scholarly subject or project, to be directed by a faculty member on the Women's Studies Program Council. Independent Study

- P: WOMSTD 1130 and junior standing
Faculty and Academic Staff

Albers, Mark A. (2004); Assistant Professor, Industrial Studies, Department of Industrial Studies; B.S., M.S., University of Wisconsin-Platteville.

Alborn-Yilek, Susan D. (2005); Coordinator, Office of Special Programs, School of Education; B.A., Buena Vista College; M.A., Drake University.

Alcalay, Eugene (2005); Associate Professor, Music, Department of Performing and Visual Arts; B.M., Indiana University School of Music; M.M., D.M.A., The Juilliard School.

Alcalay, Ruth E. Mayers (2005); Lecturer, History, Department of Social Sciences; B.A., Oxford University; M.S., Ph.D., Washington University.

Allsup, Vernon Carl (1989); Professor, Ethnic Studies, Ethnic Studies Program; Director, Ethnic Studies Program; B.A., M.A., Ph.D., University of Texas-Austin.

Almqvist, James N. (1998); Lecturer, General Engineering, Department of General Engineering; B.S., M.S., University of Wisconsin-Madison.

Anderson, David L. (2007); Laboratory Manager, College of Engineering, Mathematics and Science; B.S., University of Wisconsin-Platteville.

Anderson, Donna L. (2003); Director, Institute for Study Abroad Programs; B.A., Luther College; M.A., Loras College.

Anderson, Laura J. (1996); Associate Professor, Foreign Languages (French & Spanish), Department of Humanities; Assistant Dean, College of Liberal Arts and Education; B.A., Dana College; M.A., Ph.D., University of Missouri-Columbia.

Anderson, Max L. (1979); Professor, Civil Engineering, Department of Civil and Environmental Engineering; B.S., M.A.T., Michigan State University; M.S., Ph.D., University of Michigan. Registered Professional Engineer; Diplomate of the American Academy of Environmental Engineers.

Antczak, Thomas R. (1992); Coach, Intercollegiate Athletics; Lecturer, Physical Education, School of Education; B.S., M.S., University of Wisconsin-La Crosse.

Austin, Larry L. (1989); Lecturer, Civil Engineering, Department of Civil and Environmental Engineering; B.S., University of Wisconsin-Platteville. Registered Professional Engineer, Registered Land Surveyor.

Baker, Terry L. (1980); Lecturer, Physics, Department of Chemistry and Engineering Physics; B.S., University of Wisconsin-Platteville.

Balachandran, Swaminathan (1985); Professor, Industrial Engineering, Department of Mechanical and Industrial Engineering; B.E., University of Madras (India); M.E., Indian Institute of Science; Ph.D., Virginia Polytechnic Institute.

Ball, James A. (2001); Director, Student Union, Student Affairs; B.A., Pittsburgh State University; M.S.E., University of Nebraska-Lincoln.

Banachowski-Fuller, Cheryl A. (1997); Professor, Criminal Justice, Department of Criminal Justice; B.S., M.A., University of Toledo; Ph.D., North Carolina State University.

Banfi, Darla M. (1984); Marketing Coordinator, Distance Learning Center; B.A., M.S.E., University of Wisconsin-Platteville.

Barnet, Barbara A. (1999); Professor, Mathematics, Department of Mathematics; B.S., Bradley University; M.S., Ph.D., Iowa State University.

Barralough, Dominic J. (1999); Associate Professor, Counselor Education, School of Education; B.A., University of Washington, Seattle; M.S., Central Washington University; Ph.D., University of North Dakota.

Baxter, Christopher A. (2003); Associate Professor and State Nutrient Management Specialist, Agriculture, School of Agriculture; B.S., University of Wisconsin-Platteville; M.S., Ph.D., Purdue University.

Bayraktar, Tuba (2006); Associate Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.Sc., Suleyman Demirel University (Turkey); M.Sc., Istanbul Technical University (Turkey); Ph.D., Old Dominion University.

Beadling, Laura L. (2007); Assistant Professor, English, Department of Humanities; B.F.A., Bowling Green State University; M.A., Ph.D., Purdue University.

Becker, Debra R. (1980); Senior Outreach Specialist, Business Administration Program at a Distance; B.S., University of Wisconsin-Platteville.

Belken, Johanna (2008); Graphic Designer, Public Relations, University Advancement; B.A., University of Wisconsin-Platteville.

Benish, Steven G. (2005); Assistant Professor, Counselor Education, School of Education; B.S., M.S.E., University of Wisconsin-Platteville.

Berg, John L. (1997); Senior Academic Librarian, Karrmann Library; B.A., St. John’s University; M.Div., St. John’s School of Theology; M.A., University of Wisconsin-Madison.

Bernhardt, Dale K. (1979); Director, Student Support Services; B.S., M.S.E., University of Wisconsin-Platteville.

Bernhardt, Kevin J. (1996); Professor, Agricultural Industries, School of Agriculture; Director, Pioneer Academic Center for Community Engagement; B.S., Iowa State University; M.S., North Carolina State University; Ph.D., University of Nebraska-Lincoln.

Blevins, Sarah (2007); Financial Aid Counselor and University Scholarship Coordinator, Financial Aid, Student Affairs; B.S., University of Wisconsin-Platteville.

Bockhop, Richard L. (2002); Associate Professor, Agriculture, School of Agriculture; B.S., M.S.E., University of Wisconsin-Platteville; Ph.D., Iowa State University.
Borke, John C. (1981); Professor, Accounting, Department of Business and Accounting; B.S., M.A.S., Northern Illinois University; C.P.A. (Illinois).

Bouck, Linda H. (2000); Professor, Industrial Studies, Department of Industrial Studies; B.S., Winona State University; M.S., University of Wisconsin-Stout; Ed.D., Texas A & M University.

Boyles, David C. (1990); Professor, Mathematics, Department of Mathematics; B.S., M.S., Northern Illinois University; Ph.D., University of Wisconsin-Madison.

Braby, Russell (2006); Associate Outreach Specialist, Institute for Study Abroad; B.A., University of Wisconsin-La Crosse; M.A., Webster University.

Braun y Harycki, David M. (2000); Associate Professor, Education, School of Education; B.S., University of Wisconsin-Madison; M.S.E., University of Wisconsin-Platteville; Ed.D., University of Nebraska-Lincoln.

Brekenridge, Ryanne (2007); Associate Student Service Specialist, Department of Athletics; B.A., St. Ambrose University; M.A., Loras College.

Bromley, Patricia L. (1992); Professor, Psychology, Department of Psychology; M.S.E. Adult Education Coordinator, School of Education; B.A., University of Wisconsin-Madison; M.S.E., University of Wisconsin-Platteville; Ph.D., University of Wisconsin-Madison.

Bronold, Cathleen E. (2006); Associate Student Services Coordinator, UW-Fox Valley Engineering Program, Department of Mechanical and Industrial Engineering; B.S., M.S., University of Wisconsin-Madison.

Brooke, Wendy A. (2007); Assistant Professor, Business Administration, Department of Business and Accounting; B.S., Missouri State University; M.S., University of Wisconsin-Platteville.

Broussard, Rosalyn S. (1996); Professor, Political Science, Department of Social Sciences; B.A., Southern University; M.A., Ph.D., State University of New York at Binghamton.

Bryan, Donita (2009); Assistant Professor, Agriculture, School of Agriculture; B.S., Stephen F. Austin State University; M.S., Ph.D., Texas A & M University.

Buboltz, Jeffrey (2008); Assistant Professor, Chemistry, Department of Chemistry and Engineering Physics; B.S., University of Wisconsin-Madison; Ph.D., Cornell University.

Buechler, Dale N. (2006); Associate Professor, Electrical Engineering; Department of Electrical Engineering, Rock County Program; B.S., M.S., University of Arizona; Ph.D., University of Utah.

Bunte, Alison B. (1994); Professor, Education, School of Education; Director, School of Education; B.S., Southwest Missouri State University; M.A., University of Missouri-Columbia; Ph.D., Southern Illinois University.

Burns, Teresa M. (1994); Associate Professor, English, Department of Humanities; Director, Women's Studies Program; B.A., M.A., University of Florida; Ph.D., University of Houston.

Burton, Coree' K. (2007); Associate Residence Hall Manager, Student Housing, Student Affairs; B.A., Central Michigan University.

Busch, Dennis L. (2005); Assistant Scientist, Pioneer Farm; B.S., M.S., University of Wisconsin-Platteville; Ph.D., University of Minnesota.

Butts, Carol Sue (1998); Professor, Education, School of Education; Interim Chancellor; B.S., Minot State University; M.S., Western Oregon University; Ed.D., University of Northern Colorado.

Calceterra, Robert A. (1983); Professor, Mathematics, Department of Mathematics; B.S., Brooklyn College; M.A., Ph.D., University of Wisconsin-Madison.

Caploe, Joseph G. (1997); Associate Professor, Music, Department of Performing and Visual Arts; B.A., San Jose State; M.F.A., California Institute of the Arts.

Carlos-Cueller, Sofia (2004); Lecturer, Chemistry, Department of Chemistry and Engineering Physics; B.S., M.S., University of Iowa.

Carlson, Brad M. (2007); Lecturer, Theater, Department of Performing and Visual Arts; B.A., University of Northern Iowa.

Carey, Delbert P. (2005); Lecturer, History, Department of Social Sciences; B.S., University of Wisconsin-Platteville; M.A., Ph.D., Marquette University.

Carmen, Richard A. (2005); Lecturer, Chemistry, Department of Chemistry and Engineering Physics; B.S, Washington University, Ph.D., University of Kansas.

Carothers, Todd (2009); Assistant Professor, Business Administration, Department of Business and Accounting; B.B.A., University of Wisconsin-Eau Claire, M.B.A., University of Wisconsin-Madison.

Caywood, Thomas E. (1991); Professor, Criminal Justice, Department of Criminal Justice; Chair, Department of Criminal Justice; B.S., M.S., Central Missouri State University; Ph.D., Sam Houston State University.

Ceylan, Tamer (1982); Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., Middle East Technical University (Turkey); M.S., Ph.D., University of Wisconsin-Madison. Registered Professional Engineer.

Champeau, Jack D. (2006); Academic Program Manager, UW-Rock County Engineering Program, Department of Electrical Engineering; B.S., Bradley University; M.S., Cardinal Stritch University.

Chang, Mu-Ling (2001); Associate Professor, Mathematics, Department of Mathematics; B.S., Tunghai University (Taiwan); M.S., Tamkang University (Taiwan); Ph.D., University of Maryland.

Chelldevold, David A. (2000); Lecturer, Education, School of Education; B.A., Luther College; M.S.E., University of Wisconsin-Platteville.

Chislam, Martin D. (2002); Lecturer, Speech, Department of Performing and Visual Arts; B.A., Johnson Smith University; M.A., University of Kansas.

Christison, Charles G. (1999); Administrative Program Specialist, Distance Learning Center; B.S., University of Wisconsin-Stevens Point; M.S., University of Wisconsin-Madison.

Ciesielski, Dennis J. (1997); Professor, English, Department of Humanities; B.A., Arkansas College; M.A., Ph.D., Southern Illinois University.
Clements, Mark A. (1997); Development Manager and Database Administrator; Information Technology; B.S., University of Wisconsin-Platteville.

Clifton, Joseph M. (1984); Professor, Software Engineering, Department of Computer Science and Software Engineering; B.S., University of Wisconsin-Platteville; Ph.D., Iowa State University.

Clough, Jill M. (1985); Professor, Industrial Engineering, Department of Mechanical and Industrial Engineering; B.S., M.S., Ph.D., University of Iowa.

Coe, Gwendolyn D. (1992); Professor, Education, School of Education; B.S., Pittsburgh State University; M.A., University of Northern Colorado; Ph.D., University of Missouri-Columbia.

Collins, Benjamin V.C. (2000); Professor, Mathematics, Department of Mathematics; B.A., Central College; M.S., University of Michigan-Ann Arbor; Ph.D., University of Wisconsin-Madison.

Combs, Paul W. (2003); Lecturer, Physical Education, School of Education; Coach, Intercollegiate Athletics; B.A., Ripon College.

Compton, Michael E. (1995); Professor, Agricultural Sciences, School of Agriculture; Director, School of Agriculture; A.A.S., Danville Area Community College; B.S., M.S., Southern Illinois University; Ph.D., Virginia Polytechnic University.

Connolly, Pamela J. (1996); Lecturer, Education, School of Education; B.A., University of Colorado-Boulder; M.A., University of Northern Iowa.

Conway, Robert C. (1990); Professor, Accounting, Department of Business and Accounting; B.A., University of Wisconsin-Madison; M.S., University of Wisconsin-Whitewater; M.S., Ph.D., University of Wisconsin-Madison.

Cool, Andrea M. (1999); Lecturer, English, Department of Humanities; B.A., University of Wisconsin-Platteville; M.A., University of Missouri-Columbia.

Cooley, Dennis R. (1998); Assistant Chancellor for University Advancement; B.S., University of Wisconsin-La Crosse.

Cooper, David T. (2005); Assistant Professor, Music, Department of Performing and Visual Arts; B.M., Lawrence University; M.M., University of Akron; D.M.A., University of Wisconsin-Madison.

Cordingly, Allen E. (2006); Lecturer, Music, Department of Performing & Visual Arts; B.M., Youngstown State University; M.M., Lawrence University.

Cornett, Catherine A. (2003); Lecturer, Biology, Department of Biology; B.S., University of Wisconsin-River Falls; M.S., Iowa State University.

Cornett, Charles R. (2001); Professor, Chemistry, Department of Chemistry and Engineering Physics; Chair, Department of Chemistry and Engineering Physics; B.S., King College; Ph.D., University of Kentucky.

Cornils, Margaret A. (2005); Lecturer, Music, Department of Performing and Visual Arts; B.M., M.M., Northern Illinois University.

Courtney, Travis (2004); Student Services Coordinator, Distance Learning Center; AA, Northeast Iowa College; B.A., Clarke College.

Coover, Tom W. (1997); Information Processing Consultant, Information Technology; B.S., University of Wisconsin-Platteville.

Cramer, Robert G. (2007); Assistant Chancellor for Administrative Services; B.A., Alma College; M.S., M.A., University of Wisconsin-Madison.

Curras, Christina J. (2000); Associate Professor, Civil Engineering, Department of Civil and Environmental Engineering; B.S., M.S., Ph.D., University of California-Davis.

Curtiss, Kelly (2008); Associate Advisor, Business Administration, Department of Business and Accounting; B.S., Central Michigan University.

Daeuber, Ulz (2001); Lecturer, Physical Education, School of Education; Assistant Coach, Intercollegiate Athletics; M.S., M.S., Heidelberg University; M.S.E., University of Wisconsin-Platteville.

Dahliquist, C. Daniel (1997); Associate Professor, Speech, Department of Performing and Visual Arts; B.S., M.F.A., Ph.D., Southern Illinois University.

Dalecki, Michael G. (1991); Professor, Sociology, Department of Social Sciences; B.S., University of Wisconsin-Platteville; M.S., Texas Christian University; Ph.D., Pennsylvania State University.

Dalsing, Diedre L. (2003); Counselor, Counseling Services; Student Affairs; B.S., University of Wisconsin-Madison; M.A., Loras College.

Dargel, Dan L. (1992); Information Processing Consultant, Information Technology; B.S., University of Wisconsin-Platteville.

Daus, Barbara M. (1987); Special Assistant to the Chancellor; B.S., M.S.E., University of Wisconsin-Platteville.

Davis, Sara L. (1997); Outreach Specialist, Distance Learning Center; B.A., University of Wisconsin-Platteville.

Davis, Angela (2004); Financial Aid Counselor and Student Employment Coordinator, Financial Aid; Student Affairs; B.A., Clarke College.

Day, Susan Savage (2003); Lecturer, Music, Department of Performing and Visual Arts; B.A., University of Wisconsin-Platteville; M.M., D.M.A., University of Wisconsin-Madison.

Deis, Timothy M. (1999); Professor, Mathematics, Department of Mathematics; B.S., M.A., Mankato State University; M.S., Ph.D., University of Nebraska-Lincoln.

Demaree, Rebekah A. (1993); Lecturer, Music, Department of Performing and Visual Arts; B.A., Indiana University; M.M., University of Idaho.

Demaree, Robert K. (1992); Professor, Music, Department of Performing and Visual Arts; B.S., Indiana University; M.A., University of Iowa; D.M.A., University of Illinois at Urbana-Champaign.

Diesing, Stacey M. (2005); Advisor and Marketing Manager, Prospective Student Services, Admission and Enrollment Services, Student Affairs; B.A., Loras College.

Donahoe, Jessica J. (1999); Senior Academic Librarian, Karrmann Library; B.A., University of Wisconsin-Madison; M.A., School of Library and Information Studies, University of Wisconsin-Madison.

Doser, Linda R. (2004); Lecturer, Education, School of Education; B.S., M.S.E., University of Wisconsin-Platteville.
<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dye, Amy M.</td>
<td>Associate Lecturer, Mathematics</td>
<td>University of Wisconsin-Eau Claire</td>
</tr>
<tr>
<td>Egley, Richard W.</td>
<td>Dean of Students, Student Affairs</td>
<td>Pennsylvania State University</td>
</tr>
<tr>
<td>Ellis, Barry L.</td>
<td>Professor, Music, Department of Performing and Visual Arts</td>
<td>Furman University; University of Virginia</td>
</tr>
<tr>
<td>Elmer, Steven R.</td>
<td>Lecturer, Criminal Justice, Department of Criminal Justice</td>
<td>University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Emendorfer, Lisa A.</td>
<td>Lecturer, Physical Education, School of Education</td>
<td>William Penn College; University of Wisconsin-Platteville</td>
</tr>
<tr>
<td>Emendorfer, Michael E.</td>
<td>Lecturer, Physical Education, School of Education, Coach, Intercollegiate</td>
<td>William Penn College; University of Wisconsin-Platteville</td>
</tr>
<tr>
<td>Enright, Corinne S.</td>
<td>Associate Professor, Psychology, Department of Psychology</td>
<td>University of British Columbia-Vancouver; University of Western Ontario</td>
</tr>
<tr>
<td>Erickson, Paul J.</td>
<td>Associate University Relations Specialist, University Relations/Athletics</td>
<td>University of Wisconsin-Eau Claire</td>
</tr>
<tr>
<td>Erickson, Rob</td>
<td>Assistant Coach, Intercollegiate Athletics</td>
<td>University of Wisconsin-Stevens Point</td>
</tr>
<tr>
<td>Evensen, Harold T.</td>
<td>Professor, Engineering Physics, Department of Chemistry and Engineering</td>
<td>Michigan Technological University; University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Evenson, Mark C.</td>
<td>Associate Professor, Foreign Languages (Spanish)</td>
<td>University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Ewing, Stanley E.</td>
<td>Lecturer, Mathematics</td>
<td>University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Fager, Susan J.</td>
<td>Information Processing Consultant</td>
<td>University of Wisconsin-Platteville</td>
</tr>
<tr>
<td>Faymonville, Carmen</td>
<td>Associate Professor, English, Department of Humanities</td>
<td>University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Fawzy, Robert A.</td>
<td>Professor, Business Administration</td>
<td>University of Missouri-Kansas City</td>
</tr>
<tr>
<td>Fidrych, Robert A.</td>
<td>Professor, Electrical Engineering</td>
<td>University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Fields, Kristina</td>
<td>Assistant Professor, Civil Engineering</td>
<td>University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Finn, Lorin D.</td>
<td>Assistant Coach, Intercollegiate Athletics, Lecturer, Physical Education</td>
<td>Brigham Young University; Utah State University</td>
</tr>
<tr>
<td>Foley, Jennifer</td>
<td>Instructional Program Manager, College of Engineering</td>
<td>University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Ford, Duane M.</td>
<td>Professor, Agriculture</td>
<td>University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Foster, Patricia A.</td>
<td>Director, Women's Center</td>
<td>Mankato State University</td>
</tr>
</tbody>
</table>

295
Foust, Duane (2005); Physics Laboratory Manager; Department of Chemistry & Engineering Physics; B.S., University of Wisconsin-Platteville.

Frayer, Christopher (2008); Assistant Professor, Mathematics, Department of Mathematics; B.S., Grand Valley State University; M.S., Ph.D., University of Kentucky.

Frederick, Kari S. (1999); Laboratory Program Manager, Department of Chemistry and Engineering Physics; B.S., University of Wisconsin-Platteville.

Frese, Eric (2006); Coach, Intercollegiate Athletics; Advisor, Athletics; Marketing Specialist, Athletics; B.A., Mount Mary College.

Frieders, Elizabeth M. (1997); Professor, Biology, Department of Biology; B.A., St. Olaf College; M.S., Ph.D., University of Minnesota, St. Paul.

Fuschino, Vincenzo (2007); Coach, Intercollegiate Athletics; B.A., State University of New York at Buffalo; M.A., University of Wisconsin-Madison.

Gagne, Karen M. (2008); Assistant Professor, Sociology, Department of Social Sciences; M.A., Ph.D., Binghamton University.

Gard, Jeffrey (2006); Assistant Coach, Intercollegiate Athletics; Admission Advisor, Admission and Enrollment Services; B.S., M.S.E., University of Wisconsin-Platteville.

Garrett, Richard L. (2006); Lecturer, English, Department of Humanities; B.A., M.A., Stephen F. Austin State University.

Garry, Colleen K. (1992); Director, Radio and Television, Media Technology Services; B.S., University of Wisconsin-Platteville; M.S., Boise State University.

Gates, Elizabeth A. (2000); Associate Professor, Psychology, Department of Psychology; Chair, Department of Psychology; B.A., Grinnel College; M.A., Ph.D., University of Iowa.

Gavin, Donna M. (1996); Lecturer; Computer Science, Department of Computer Science and Software Engineering; B.A., St. Xavier College; M.S., Nova Southeastern University of Florida.

Gias, Sharif (2008); Assistant Professor, Business Administration, Department of Business and Accounting; B.B.A., North South University; M.B.A., Delaware State University.

Gill, Mohaninder S. (1980,1983); Professor, Computer Science, Department of Computer Science and Software Engineering; Chair, Department of Computer Science and Software Engineering; B.S., Mahendra College (India); M.S., Panjabi University (India); M.S., Syracuse University.

Gimski, Gordon V. (2001); Lecturer, Mathematics, Department of Mathematics; B.S., University of Wisconsin-Platteville; M.Nat.Sc., University of Oklahoma.

Goomey, John R. (2000); Lecturer, Electrical Engineering, Department of Electrical Engineering; B.S., B.S., University of Wisconsin-Milwaukee; M.S., University of Wisconsin-Madison.

Gormley, Melissa E. (2008); Assistant Professor, History, Department of Social Sciences; B.A., M.A., San Francisco State University; Ph.D., University of California, Davis.

Gottlieb, Rebecca I. (1997); Lecturer, English, Department of Humanities; B.A., Dartmouth College; M.A., Cornell University.

Gottlieb, Rebecca I. (1997); Lecturer, English, Department of Humanities; B.A., Dartmouth College; M.A., Cornell University.

Grattan, Brian (2000); Assistant Registrar; B.A., University of Dubuque; M.A., Loras College.

Hamilton, James P. (1995); Professor, Chemistry, Department of Chemistry and Engineering Physics; B.A., University of Maine-Orono; Ph.D., University of Wisconsin-Madison.

Hammermeister, John F. (2005); Assistant Professor, Business Administration; Department of Business and Accounting; B.A., Augustana College; M.B.A., University of Oregon.

Hansen, Susan L. (1991 Professor, Business Administration, Department of Business and Accounting; Coordinator, Business Administration Program at a Distance (Online); B.A., Bethany College; M.B.A., University of Missouri-Kansas City; Ph.D., Argosy University-Sarasota.

Hanten, Dianne M. (1996); Associate Registrar; B.A., University of Dubuque; M.A., Loras College.

Harris, Bernard W. (1983); Associate Professor, Business Administration, Department of Business and Accounting; B.S., M.B.A., Youngstown State University.

Hasker, Robert W. (1996); Professor, Software Engineering, Department of Computer Science and Software Engineering; B.S., Wheaton College; Ph.D., University of Illinois at Urbana-Champaign.

Haskins, William D. (2003); Coordinator, Graduate Program in Project Management; B.A., St. Olaf College; M.S., University of Wisconsin-Platteville.
Haslauer, Edina (2001); Lecturer, Foreign Languages (German), Department of Humanities; B.A., Loras College; M.S.E., University of Wisconsin-Platteville.

Hassig, John M. (2001); Program Coordinator, Center for the Arts & Nohr Gallery, Campus Life; B.A., Teikyo Marycrest University; M.A., University of Illinois at Springfield.

Hawkinson, Christine (2008); Associate University Relations Specialist, Distance Learning Center, Alternative Delivery Systems; B.S., Western Illinois University; M.S., University of Wisconsin-Madison.

Heine, Dale W. (2001); Lecturer, Education, School of Education; B.A., University of Wisconsin-Madison; M.S.E., University of Wisconsin-Platteville; M.A., Loras College.

Heck, Susan M. (1989); Lecturer, History, Department of Social Sciences; B.A., University of Wisconsin-Platteville; M.A., Loras College.

Henze, Michelle (2008); Associate Residence Hall Manager, Student Housing, Student Affairs; B.A., Mount Mercy College.

Hibbard, James B. (2000); Senior Academic Librarian, Karrmann Library; B.S., Western Michigan University; M.L.S., Indiana University.

Higgins, Aaron (2006); Lead Teacher, Children's Center, Student Affairs; B.A., M.S.E., University of Michigan.

Hill, Russel W. (2002); Production Manager, Media Technology Services; B.S., University of Wisconsin-Platteville.

Hines, Peggy (2008); Associate Counselor, University Counseling Services; B.A., Mills College; M.S.E., University of Wisconsin-Platteville.

Hoerning, Jeff M. (2004); Associate Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., M.S., Ph.D., University of Wisconsin-Madison.

Hollingsworth, Lisa (2007); Outreach Program Manager, Distance Learning Center; B.A., Luther College; M.B.A., University of Phoenix.

Holverson, Clyde A. (1992); Senior Instrumentation Specialist, College of Engineering, Mathematics and Science; B.S., University of Wisconsin-Platteville.

Howdle, Bruce C. (2005); Lecturer, Art, Department of Performing and Visual Arts; B.S., University of Wisconsin-Platteville, M.A., Northern Arizona University, M.F.A., Arizona State University.

Hu, Yuanyuan (2007); Assistant Professor, English, Department of Humanities; B.A., Hangzhou University (China); M.A., Zhejiang University (China); Ph.D., Purdue University.

Huebschman, Jeffrey J. (2003); Associate Professor, Biology, Department of Biology; Chair, Department of Biology; B.A., Concordia College; M.A., University of Nebraska-Omaha, Ph.D., University of Nebraska.

Hunt, Eli P. (2009); Assistant Professor, Industrial Studies, Department of Industrial Studies; B.S., M.S., University of Wisconsin-Stout

Hunt, Thomas C. (1999); Professor, Horticulture, School of Agriculture; Director, Reclamation, Environment and Conservation, School of Agriculture; B.S., M.S., Ph.D., University of Wisconsin-Madison.

Husser, Mike (2004); Financial Aid Counselor, Financial Aid, Student Affairs; B.S., Lakeland College.

Ifediora, John O. (1988); Professor, Economics, Department of Social Sciences; B.A., Dakota Wesleyan University; M.A., Roosevelt University; M.S., Illinois Institute of Technology; Ph.D., University of Illinois-Chicago; J.D., University of Wisconsin-Madison.

Ira, Michael S. (2000); Associate Professor, Mathematics, Department of Mathematics; B.S., M.S., University of Nebraska-Lincoln.

Iselin, John P. (2004); Associate Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., M.S., University of Dayton; Ph.D., Iowa State University.

Iselin, Walter C. (1979); Professor, Physical Education and Health, School of Education; Director, Clinical Experience and Education Placement, School of Education; Coordinator, M.S.E. Program in Wuhan, China; B.S., M.S., University of Wisconsin-La Crosse; Ph.D., University of Wisconsin-Madison.

Jadaan, Lee (2007); Director, Public Relations, University Advancement; B.A., University of Jordan (Jordan).

Jadaan, Osama M. (1990); Professor, General Engineering, Department of General Engineering; Chair, Department of General Engineering; B.S., M.S., Ph.D., Pennsylvania State University.

James, Linda R. (1999); Assistant Professor, Art, Department of Performing and Visual Arts; B.F.A., University of Georgia; M.F.A., University of Illinois-Chicago.

Jarrard, James L. (2005); Lecturer; Business, Department of Business and Accounting; B.A., Loras College, M.B.A., University of Iowa.

Jensen, Jennifer L. (2005); Instructional Program Manager, UWFox Valley Engineering Program, Department of Mechanical and Industrial Engineering; B.A., University of Wisconsin-Madison; M.S.E., University of Wisconsin-Oshkosh.

Jeske, Clement T. (1984); Professor, Mathematics, Department of Mathematics; B.S., M.A., Ph.D., University of Wisconsin-Madison.

Jinkins, Patricia A. (2001); Associate Professor, Industrial Engineering, Department of Mechanical and Industrial Engineering; B.S., M.S., University of Tennessee; D.E., Texas A & M University.

Johnson, Kelly Jo (2001); Associate Residence Hall Manager, Student Housing, Student Affairs; B.S., Iowa State University.

Kaiser, Colleen R. (1998); Professor, Industrial Studies, Department of Industrial Studies; B.S., M.S., University of Wisconsin-Platteville; Ph.D., University of Wisconsin-Madison.

Kaltzas, Konstantin (2008); Media Specialist, Media Technology Services; B.S., Western Governors University.
Karsten, Margaret E. (1981); Professor, Business Administration, Department of Business and Accounting; Coordinator, Business Administration Program at a Distance (Print-based); B.A., Winona State University; M.B.A., University of Wisconsin-Madison.

Kelley, Kathleen A. (1984); Director, Human Resources/Affirmative Action; B.S., University of Wisconsin-Madison.

Kieckhafer, David (2007); Registrar; B.S., Lakeland College; M.S., University of Wisconsin-Milwaukee.

Kile, Justin W. (2005); Assistant Professor, Industrial Engineering, Department of Mechanical and Industrial Engineering; B.S., Rochester Institute of Technology, M.S., Ph.D., University of Michigan.

Kim, Ahyoung (2007); Assistant Professor, Mathematics, Department of Mathematics; B.S., B.S., Yonsei University (South Korea); Ph.D., University of Wisconsin-Madison.

Kinwa-Muzinga, Annie (2002); Associate Professor, Agriculture, School of Agriculture; B.A., University of Kinshasa (Democratic Republic of Congo); M.B.A., Ph.D., University of Illinois.

Kirk, Rea H. (1996); Professor, Education, School of Education; B.A., UCLA; M.S., Eastern Montana College; Ed.D., University of Southern California.

Klavs, Sharon D. (2005); Assistant Professor, Biology, Department of Biology; B.A., Duke University; M.S., Ph.D., Southern Illinois University.

Kleisth, Stephen W. (1980); Professor, Business Administration, Department of Business and Accounting; Chair, Department of Business and Accounting; B.S., Pennsylvania State University; M.S., University of Nebraska-Omaha; D.B.A., Nova Southeastern University.

Knox, Charles M. (2004); Assistant Professor, Industrial Studies, Department of Industrial Studies; B.S., M.S., University of Wisconsin-Platteville.

Konken, Lindsey (2006); Associate Admission Advisor and Territorial Manager, Admission and Enrollment Services; B.S., University of Wisconsin-Platteville.

Kou, Xiaomin (2003); Associate Professor, Electrical Engineering, Department of Electrical Engineering; B.E. Chong Qing University (China); M.S., Ph.D., University of Wisconsin-Milwaukee.

Kraemer, David R. (2002); Associate Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., University of Notre Dame; M.S., University of Michigan; M.S., Ph.D., Johns Hopkins University.

Kreul, Amy (2007); Director, Publications, University Advancement; B.S., University of Wisconsin-Platteville.

Kronick, Harry N. (2004); Lecturer, English, Department of Humanities; B.A., Manhattan College; M.A., University of Michigan.

Krueger, Andrew B. (2005); Computer Support Specialist, Information Technology; B.S., University of Wisconsin-Platteville.

Krueger, Tara (2005); Associate Admission Advisor and Territorial Manager, Admission and Enrollment Services; B.S., University of Wisconsin-Platteville.

Krugler, David E. (1997); Professor, History, Department of Social Sciences; B.A., Creighton University; M.A., Ph.D., University of Illinois at Urbana-Champaign.

Kuhle, Christina M. (2002); Coach, Intercollegiate Athletics; Associate Lecturer, Physical Education, School of Education; B.A., Clarke College.

Kunz, David N. (1997); Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; Chair, Department of Mechanical and Industrial Engineering; B.S., University of Michigan; M.S., University of Wyoming; Ph.D., University of Wisconsin-Madison.

Kwon, Miyeon (2004); Associate Professor, Mathematics, Department of Mathematics; B.Ed., M.Ed., Korea National University of Education; M.A., Ph.D., University of Alabama.

Landgraf, Lisa M. (2007); Assistant Professor, Computer Science, Department of Computer Science and Software Engineering; B.S., Iowa State University; M.A., University of Iowa; Ph.D., Nova Southeastern University.

Larson, Evan (2009); Assistant Professor, Geography, Department of Social Sciences; B.A., Willamette University; M.S., University of Tennessee.

Lauinger, Catherin (2008); Operations Program Manager, University Centers, Auxiliary Services; B.A., Carroll College.

Leahy, LeAnn (2005); Student Services Specialist, Services for Students with Disabilities, Student Affairs; B.S., Loras College; M.S.E., University of Wisconsin-Platteville.

Lee, Joong-Jae (2000); Associate Professor, History, Department of Social Sciences; B.S., Iowa State University; B.A., Korea University; Ph.D., New York University.

Leitch, Daniel E. (2008); Assistant Professor; Education, School of Education; B.A., Bowling Green State University; M.S.E., University of Wisconsin-Stevens Point; Ph.D., University of Wisconsin-Madison.

Lenzi, Mary E. (2001); Assistant Professor, Philosophy, Department of Humanities; B.A., Bryn Mawr College; Ph.D., University of Pennsylvania.

Lerner, Anne-Marie (2008); Assistant Professor; Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., Washington University; M.S., Ph.D., Georgia Institute of Technology.

Levy, Victor M. (1992); Senior Lecturer, Education, School of Education; B.A., Maclester College; M.S., University of Wisconsin-Madison.

Li, Qiong (2001); Associate Professor, Chemistry, Department of Chemistry and Engineering Physics; B.S., Inner Mongolia Normal University (China); M.S., Research Institute of Petroleum Processing-Beijing; Ph.D, Northeastern University.

Li, Wei (2003); Associate Professor, Physics, Department of Chemistry and Engineering Physics; B.S., Jilin University (China); M.S., Nankai University (China); Ph.D., University of Waterloo (Canada).

Li, Yong Yuan (1991); Professor, Electrical Engineering, Department of Electrical Engineering; B.S., Tsing Hua University (China); M.S., Ph.D., University of Houston.
Liska, Terrence L. (1980); Professor, Economics, Department of Social Sciences; B.A., M.A., Ph.D., University of Wisconsin-Milwaukee.

Little, Jennifer (2005); Residence Hall Manager, Student Housing, Student Affairs; B.A., University of Wisconsin-Stevens Point; M.S.E., University of Wisconsin-Platteville.

Ljumanovic, Leonida (2008); Assistant Professor, Mathematics, Department of Mathematics; B.S., M.S., University of Iowa.

Logan, Daryl L. (1993); Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., M.S., Ph.D., University of Illinois-Chicago.

Lo Guidice, Thomas (1990); Professor, Education, School of Education; Director, Teaching Excellence Center; B.S., M.S., Ph.D., Florida State University.

Lomax, Joe B. (1969-87, 1991); Professor, Criminal Justice, Department of Criminal Justice; B.S., University of Wisconsin-Stevens Point; M.A.T., University of Wisconsin-Platteville.

Lomax, Kathryn (1993); Director, Sponsored Programs; B.S., M.S.E., University of Wisconsin-Platteville.

Lukowski, Stanislaw A. (1988); Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; M.S., Ph.D., Technical University of Wroclaw (Poland).

Machovec, Valerie (2005); Computer Support Specialist, Information Technology; B.S., University of Wisconsin-Platteville.

Maier, Kimberly (2004); Outreach Specialist, Distance Learning Center; B.S., University of Wisconsin-Platteville.

Maciej-Hiner, Marian G. (1993); Director, Continuing Education; Director, Confucius Institute; B.A., St. Cloud State University; M.S., University of Wisconsin-Madison.

Mahoney, Kris H. (2008); Assistant Professor, Agriculture, School of Agriculture; B.Sc, M.Sc., North Dakota State University; Ph.D., University of Guelph, Ontario, Canada.

Mailoux, Mark R. (2006); Institutional Research Manager, Information Technology; B.A., University of Rhode Island; M.S., University of Wisconsin-Madison.

Mann, Susan M. (1999) Outreach Program Manager, Distance Learning Center; B.S., University of Wisconsin-Platteville.

Manwiller, Nathan (2008); Technical and Event Services Coordinator, Technical Services, Student Affairs; B.A., University of Wisconsin-Platteville.

Marco, John S. (2001); Senior Lecturer, Music, Department of Performing and Visual Arts; B.M., Manhattan School of Music; M.A., Queens College.

Marquardt, Scott (2009); Director, University Police; B.S., University of Wisconsin-Platteville.

Masoom, Abulkhair M. (1990); Professor, General Engineering, Department of General Engineering; B.S., University of Engineering and Technology (Bangladesh); M.E., Carleton University (Canada); M.S., Ph.D., University of Wisconsin-Madison.

Masoom, Fahmida R. (1998); Senior Lecturer, General Engineering, Department of General Engineering; B.S., University of Rajshahi, (Bangladesh); M.S., University of Wisconsin-Madison.

McBeth, William C. (1996); Professor, Education, School of Education; B.S., M.S., University of Nebraska-Lincoln; Ph.D., Southern Illinois University.

McCabe, Colleen A. (2000); Assistant Professor, Physical Education & Health, School of Education; B.S., University of Wisconsin-Oshkosh; M.A., Saint Mary's University; Ed.D., Edgewood College.

McDermott, Jodi L. (1995); Administrative Specialist, School of Agriculture; Assistant Dean, College of Business, Industry, Life Science and Agriculture; B.S., M.S.E., University of Wisconsin-Platteville.

McDonald, Julia K. (2000); Professor, Mathematics, Department of Mathematics; Chair, Department of Mathematics; B.S., M.Ed., University of Wisconsin-Platteville; M.S., Ph.D., University of Iowa.

McNamarag, Denise L. (2008); Assistant Professor, Agriculture, School of Agriculture; B.S., University of Wisconsin-River Falls; M.S., Ph.D., University of Missouri-Columbia.

McNeill, Andrew (2006); Media Specialist, Public Relations, University Relations; B.A., University of Wisconsin-Platteville.

Mee, Michael O. (1991); Professor, Agricultural Sciences, School of Agriculture; B.S., University of Wisconsin-Platteville; M.S., Ph.D., Kansas State University.

Meinhardt, David J. (1996); Senior Lecturer, Communication Technologies, Department of Communication Technologies; B.S., M.S.E., University of Wisconsin-Platteville.

Mendis, Chanaka (2004); Associate Professor, Chemistry, Department of Chemistry and Engineering Physics; B.S., State University of New York at Old Westbury; M.S., Ph.D., Georgetown University.

Mentz, Randy S. (2003); Research Specialist, Agriculture, School of Agriculture; B.S., University of Wisconsin-Stevens Point.

Metzloff, Kyle E. (1998); Professor, Industrial Studies, Department of Industrial Studies; B.S., University of Missouri-Rolla; M.S., Ph.D., University of Wisconsin-Madison.

Meyer, Roger J. (1984); Director and Counselor, University Counseling Services; B.A., Loras College; M.S.E., University of Wisconsin-Platteville.

Meyers, Mark S. (2000); Associate Professor, Civil Engineering, Department of Civil and Environmental Engineering; Chair, Department of Civil and Environmental Engineering; B.S., University of Wisconsin-Platteville; M.S., Ph.D., University of Cincinnati. Registered Professional Engineer.

Miller, David E. (1999); Senior Lecturer, Biology, Department of Biology; B.S., University of Wisconsin-Platteville; M.A., Ed.D., Ball State University.

Mirth, John A. (1997); Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., Ohio University; M.S., Ph.D., University of Minnesota.

Mitchell, Traper J. (2006); Associate Residence Hall Manager, Student Housing, Student Affairs; B.A., University of Nebraska at Kearney.

Moiz, Syed M. (2006); Assistant Professor, Accounting, Department of Business and Accounting; M.B.A., University of Karachi (Pakistan); M.B.A., Minnesota State University.
Molesworth, Mark D. (1996); Director, Intercollegiate Athletics; B.A., Baldwin-Wallace College; M.A., Ohio State University.

Momot, Michael E. (1997); Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., Rensselaer Polytechnic Institute; M.S., Ph.D., Purdue University.

Monhardt, Leigh C. (2007); Associate Professor, Education, School of Education; B.A., Luther College; M.S., Ph.D., University of Iowa.

Moninski, Richard J. (2001); Senior Lecturer, Art, Department of Performing and Visual Arts; B.F.A., University of Massachusetts; M.F.A., State University of New York at Albany.

Montgomery, Patrick J. (2006); Assistant Professor, Accounting, Department of Business and Accounting; B.A., M.B.A., M.A., St. Ambrose University.

Montgomery, Tera (2009); Assistant Professor, Agriculture, School of Agriculture; B.S., University of Wisconsin-River Falls; M.S., University of Maryland; Ph.D., University of Illinois, Urbana-Champaign.

Moore, Gerald F. (2002); Lecturer, Mathematics, Department of Mathematics; B.A., M.S.E., University of Wisconsin-Madison.

Morgan, Rick P (1999); Outreach Program Manager, Continuing Education; B.S.E., M.S., University of Wisconsin-La Crosse.

Morris, Susan C. (2006); Assistant Professor, Political Science, Department of Social Sciences; B.S., George Washington University; M.A., Indiana University of Pennsylvania; M.A., Ph.D., Old Dominion University.

Mroch, Anna I. (2007); Residence Hall Manager, Student Housing, Student Affairs; B.S., University of Wisconsin-Platteville.

Mueller, James P. (1997); Executive Director, Auxiliary Services; B.S., University of Wisconsin-Stevens Point; M.S., University of Wisconsin-Platteville.

Mulroy-Bowden, Linda A. (1990); Associate Director, Student Housing, Student Affairs; B.S., University of Wisconsin-Eau Claire; M.S., University of Wisconsin-La Crosse.

Munz, Ryan (2008); Assistant Coach, Intercollegiate Athletics; B.S., University of Wisconsin-Platteville.

Muslu, Mesut (1986); Professor, Electrical Engineering, Department of Electrical Engineering; B.S., Middle East Technical University (Turkey); M.S., Ph.D., University of Missouri-Rolla. Registered Professional Engineer.

Muslu, Zehra (1998); Lecturer, Mathematics, Department of Mathematics; B.S., Yildiz University (Turkey); B.S., University of Wisconsin-Platteville.

Musselman, Jonathan W. (2001); Senior Academic Librarian, Karrmann Library; B.A., Northwestern College; M.S.E., University of Wisconsin-Platteville; M.S.L.I.S., University of Illinois at Urbana-Champaign.

Narayan, Chetna (1988); Professor, Psychology, Department of Psychology; B.A., University of Delhi (India); M.A., Jawaharlal Nehru University (India); M.S., Ph.D., Iowa State University.

Nelson, Gregory T. (2002); Lecturer, Art, Department of Visual and Performing Arts; B.A., Minnesota College of Art & Design; M.A., Syracuse University.

Nelson, Paula M. (1988); Professor, History, Department of Social Sciences; B.A., Southwest State University; M.A., University of South Dakota; Ph.D., University of Iowa.

Nelson, Thomas B. (1993); Professor, Civil Engineering, Department of Civil and Environmental Engineering; B.S., U.S. Military Academy; M.S.E., Ph.D., Purdue University. Registered Professional Engineer.

Nemitz, Clinton (2007); Associate Outreach Specialist; Alternative Delivery Systems; B.S. University of Wisconsin-Platteville.

Nevins, David M. (2000); Leadership Development Coordinator, Student Affairs; B.S., University of Wisconsin-Stevens Point; M.S., Western Illinois University.

Nevins, Mary Cheryl (2000); Assistant Director, Student Housing; B.A., North Central College; M.S., Western Illinois University.

Ni, Liya (2007); Assistant Professor, Electrical Engineering, Department of Electrical Engineering; B.S., Xi’an Jiaotong University (China); M.S., National University of Singapore; Ph.D., University of Waterloo (Canada).

Nickasch, James R. (2001); Lecturer, Physical Education, School of Education; Coach, Intercollegiate Athletics; B.S., M.S., University of Wisconsin-La Crosse.

Nikolai, Scott A. (2004); Senior Lecturer, Political Science, Department of Social Sciences; B.A., St. Norbert College; M.A., University of Wisconsin-Milwaukee; Ph.D., Texas Tech University.

Nimocks, Mittie J. (1986); Professor, Speech, Department of Performing and Visual Arts; Dean, College of Liberal Arts and Education; B.S., University of Southern Mississippi; M.A., University of Illinois; Ph.D., University of Florida.

Nkennji, John F. (1988); Professor, Education, School of Education; B.A., University of Wyoming; M.Ed., Ph.D., University of Texas-Austin.

Nzegwu, Louis I. (1991); Professor, Business Administration, Department of Business and Accounting; B.S., Alcorn State University; M.B.A., Morgan State University; M.Ed., University of Southern Mississippi.

Ofulue, Esther N. (1999); Professor, Biology, Department of Biology; B.S., University of Nigeria; M.S., University of Ibadan (Nigeria); Ph.D., University of British Columbia-Vancouver (Canada).

Olcay, Ali Bahadir (2007); Assistant Professor, General Engineering, Department of General Engineering; B.S., Middle East Technical University (Turkey); M.S., Southern Illinois University; Ph.D., Southern Methodist University.

Omachonu, Florence (2008); Assistant Professor, Education, School of Education; B.A., University of District of Columbia; M.Ed., George Mason University.

Omernik, Erik S. (2008); Associate Advisor, Graduate Programs in Wuhan, China; B.S., University of Wisconsin-Platteville.

Owusu-Ababio, Samuel (1991); Professor, Civil Engineering, Department of Civil and Environmental Engineering; B.S., University of Science and Technology (Ghana, West Africa); M.S., Ph.D., University of Massachusetts at Amherst.

Parker, Philip J. (1998); Professor, Environmental Engineering, Department of Civil and Environmental Engineering; B.S., Ph.D., Clarkson University.
Parsons, Theron E., IV. (1996); Professor, Psychology, Department of Psychology; B.A., King College; M.S., Ph.D., University of Georgia.

Parsons, Amy (2007); Assistant Professor, English, Department of Humanities; B.A., Sonoma State University; M.A., Ph.D., University of California-Irvine

Patton, Nolan (2004); Residence Hall Manager, Student Housing, Student Affairs; B.S., M.S., Murray State University.

Pauly, Regina R. (2001); Senior Academic Librarian, Karrmann Library; B.S., M.A., University of Wisconsin-Madison.

Pavick, Thomas J. (1998); Senior Lecturer, Business Administration, Department of Business and Accounting; B.A.S., University of Minnesota; M.B.A., University of St. Thomas.

Peckham, Brian W. (1987); Associate Professor, Economics, Department of Social Sciences; B.A., Stanford University; M.A., Ph.D., University of Wisconsin-Madison.

Penn, Michael R. (1997); Professor, Environmental Engineering, Department of Civil and Environmental Engineering; B.S., M.S., University of Michigan; Ph.D., Michigan Technological University.

Perkins, Madonna J. (1990); Professor, Business Administration, Department of Business and Accounting; B.S., University of Wisconsin-Platteville; M.B.A., University of Dubuque.

Perkins, Wendy L. (2003); Lecturer, English, Department of Humanities; B.A., Purdue University; M.A., University of Wisconsin-Madison.

Peters, Pamela (2007); Assistant Professor, Mathematics, Department of Mathematics; B.A., Arizona State University; M.S., University of Southern California; M.S., Ph.D., Colorado State University.

Peters, Rebecca L. (1998); Director, Student Success Center; Coordinator, Services for Students with Disabilities, Student Affairs; B.S., Iowa State University; M.S.E., University of Wisconsin-Platteville.

Phillips, Julie M. (1993); Lecturer, Education, School of Education; B.A., University of Northern Iowa; M.A., University of Iowa; M.B.A., Nova Southeastern University of Florida.

Pink, Sharon M. (1985); Counselor, Student Support Services; B.S., M.S.E., University of Wisconsin-Platteville.

Popovich, Steven R. (2006); Assistant Professor, Electrical Engineering, Department of Electrical Engineering, Rock County Program; B.S., M.S., Ph.D., University of Wisconsin-Madison.

Portillo, Annette (2009); Assistant Professor, English, Department of Humanities; B.A., University of California-San Diego; M.A., Ph.D., Cornell University.

Pothour, Patricia (2008); Associate Advisor, Prospective Student Services, Admission and Enrollment Services; B.S., University of Wisconsin-Platteville; B.A., University of Wisconsin-Platteville.

Price, Susan G. (1988); Professor, Agricultural Sciences, School of Agriculture; M.S., University of Wisconsin-Madison; D.V.M., Purdue University.

Prill-Adams, Alicia L. (1990); Administrative Program Specialist, Agricultural Sciences, School of Agriculture; B.S., Illinois State University; M.S., Southern Illinois University.

Putnam, Deborah L. (2001); Assistant Director, Catering and Retail Operations; B.S. University of Wisconsin-Platteville.

Rahman, Syed M. (2006); Assistant Professor, Software Engineering, Department of Computer Science and Software Engineering; B.S., Bangladesh University of Engineering and Technology (Bangladesh); M.S., Ph.D., North Dakota State University.

Ranney, Arthur L. (1998); Professor, Communication Technologies, Department of Communication Technologies; Chair, Department of Communication Technologies; B.A., University of Cincinnati; M.A., Ph.D., Ohio State University.

Ravikumar, Prathivadi B. (1990); Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., Bangalore University (India); Ph.D., Kansas State University.

Rawling, J. Elmo (2002); Associate Professor, Geography, Department of Social Sciences, Chair, Department of Social Sciences; B.A., University of Wisconsin-Milwaukee; M.S., University of Wisconsin-Madison; Ph.D., University of Wisconsin-Milwaukee.

Ray, Shenita L. (2006); Assistant Director, Distance Learning Center; B.S., M.S.E., Marquette University.

Reddy, Avuthu Rami (1999); Associate Professor, Agriculture, School of Agriculture; B.Sc., Andhra Pradesh Agricultural University (India); M.B.A., Fort Hays State University; M.B.A., Nagarjuna University (India); Ph.D., Texas A & M University.

Reed, B.J. (1999); Professor, Communication Technologies, Department of Communication Technologies; B.A., M.A., Ed.S., Ed.D., Drake University; APR, CMP.

Reuter, Cynthia E. (1983); Systems Administrator, Dining Services; B.S., University of Wisconsin-Platteville.

Reynolds, Helen R. (1998); Coordinator, Advising and Career Exploration Services, Student Affairs; B.M.E., M.Ed., James Madison University; M.S., Iowa State University.

Richardson, Bradley T. (2001); Transfer and Admission Advisor, Admission and Enrollment Services, Student Affairs; B.A., Huntington College; M.S.E., Capella University.

Riedl-Farrey, Cathy J. (1999); Director of Business Services, Administrative Services; B.S., University of Wisconsin-Platteville; C.P.A. (Wisconsin)

Riedle, Joan E. (1981); Professor, Psychology, Department of Psychology; B.A., Indiana University; M.A., Ph.D., University of New Mexico.

Riedle, Lisa A. (1990); Professor, Civil Engineering, Department of Civil and Environmental Engineering; Associate Dean, College of Engineering, Mathematics and Science; B.S., University of Wisconsin-Platteville; M.S., Ph.D., University of Alabama.

Riley, Todd R. (2001); Senior Physician and Medical Director, Student Health Services, Student Affairs; B.S., University of Wisconsin-Platteville; M.D., Medical College of Wisconsin.

Rimel, Eric W. (2008); Assistant Professor, Industrial Studies, Department of Industrial Studies; B.S., M.Ed., University of Idaho.

Ringgenberg, Renee (2005); Lecturer, Physical Education, School of Education; B.S., University of Wisconsin-La Crosse, M.S.E., University of Wisconsin-Platteville.
Ringgenberg, Scott W. (2000); Assistant Professor, Physical Education, School of Education; B.S., M.S., University of Wisconsin-La Crosse; Ed.D., Edgewood College.

Rink, John R. (1993); Professor, Political Science, Department of Social Sciences; B.A., M.A., University of Wisconsin-Milwaukee; Ph.D., Southern Illinois University.

Roberts, Matthew W. (2002); Associate Professor, Civil Engineering, Department of Civil and Environmental Engineering; B.S., Brigham Young University; M.S., Ph.D., Texas A & M University.

Roberts, Robert (2007); Assistant Professor, Criminal Justice, Department of Criminal Justice; B.S., University of Wisconsin-Platteville; M.A., University of Wisconsin-Oshkosh.

Rolle, Kurt C. (1980); Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., Purdue University; M.S., Ph.D., University of Dayton. Registered Professional Engineer.

Ross, Edward L. (2001); Senior Lecturer, Criminal Justice, Department of Criminal Justice; B.A., Winona State University; M.S.W., University of Illinois at Urbana-Champaign.

Rotzenberg, Chris (2007); Assistant Coach, Intercollegiate Athletics; B.S., University of Wisconsin-Whitewater; M.S., University of Wisconsin-La Crosse.

Rowe, Michael C. (2002); Associate Professor, Software Engineering, Department of Computer Science and Software Engineering; B.A., University of Minnesota, Duluth; M.A., Ph.D., University of North Dakota; M.B.A., Western Michigan University; Ph.D., University of North Texas.

Rowley, David G. (1999); Associate Professor, History, Department of Social Sciences; B.A., University of Michigan; M.A., University of Illinois-Chicago; Ph.D., University of Michigan.

Ruane, Michael (2006); Assistant Professor, Chemistry, Department of Chemistry and Engineering Physics; B.S., University of Arizona; Ph.D., University of Wyoming.

Safari-Shad, Nader (2001); Associate Professor, Electrical Engineering, Department of Electrical Engineering; B.S., M.S., Oregon State University; Ph.D., University of Wisconsin-Madison.

Sagehorn, John (2007); Residence Hall Manager, Student Housing, Student Affairs; B.S., University of Wisconsin-Oshkosh; M.S., Illinois State University.

Saiz, Peter R. (2004); Lecturer, English, Department of Humanities; B.A., University of Wisconsin-Madison; M.A., Wichita State University; Ph.D., Purdue University.

Salmon-Stephens, Tammy J. (1997); Director, Women in Engineering Program and Engineering Advising Office; B.S., M.S., University of Wisconsin-Platteville.

Sanyi, Allison (2008); Assistant Coach, Intercollegiate Athletics; B.S., Loras College.

Scanlan, Thomas N. (1984); Professor, Computer Science, Department of Computer Science and Software Engineering; B.A., Marian College; M.A., Arizona State University; M.S., University of Alabama.

Schlager, Lynn M. (1997); Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., Washington University; M.S., Stanford University; Ph.D., Iowa State University.

Schlueter, Jean E. (1996); Senior Student Health Nurse, University Health Services; B.S.N., University of Wisconsin.

Schmelz, Kimberly (2004); Alumni Director, Alumni Services, University Advancement; B.S., University of Wisconsin-Platteville.

Schmidt, April M. (2006); Lecturer, English, Department of Humanities; B.S., M.S., University of Wisconsin-Platteville.

Schmidt, Colleen (2005); Associate Student Services Specialist, Department of Athletics; B.A., M.A., Lakeland College.

Schmitt, Robert L. (1998); Professor, Civil Engineering, Department of Civil and Environmental Engineering; B.S., M.S., Purdue University; Ph.D., University of Wisconsin-Madison.

Schneider, Juliette (2008) Associate Student Services Specialist, Children's Center, Student Affairs; B.S., University of Wisconsin-Platteville.

Schoonover, JoEllen B. (2002); Director, Dining Services; B.S., Purdue University.

Schroeder, Machelle K. (1990); Professor, Business Administration, Department of Business and Accounting; B.B.A., University of Wisconsin-Whitewater; M.B.A., University of Wisconsin-Parkside; Ph.D., University of Wisconsin-Madison.

Schuldes, Christine (2008); Distance Learning Coordinator and Lecturer, Business and Accounting, Department of Business and Accounting; B.S., M.S., University of Wisconsin-La Crosse; Ph.D., Capella University.

Schulenburg, Chris (2007); Assistant Professor, Foreign Languages (Spanish), Department of Humanities; B.A., University of Wisconsin-Madison; M.A., University of Colorado; Ph.D., University of Wisconsin-Madison.

Schuler, David D. (2006); Assistant Professor, Theater, Department of Performing and Visual Arts; B.M. Susquehanna University; M.A., State University of New York at Binghamton; Ph.D., University of Colorado.

Schulman, Debra L. (1988); Coach, Intercollegiate Athletics; Assistant Director, Athletics; B.S., University of Wisconsin-Milwaukee; M.S., Indiana University.

Sealy, Philip J. (1998); Associate Professor, Electrical Engineering, Department of Electrical Engineering; Chair, Department of Electrical Engineering; B.S., M.S., Ph.D., University of Wisconsin-Madison.

Sharkey, Michael (2006); Assistant Professor, Philosophy, Department of Humanities; B.A., University of Notre Dame; M.A., Ph.D., Fordham University.

Sharma, Piyare L. (1986); Professor, Electrical Engineering, Department of Electrical Engineering; B.S., Regional Engineering College (India); M.S., Indian Institute of Technology (India); Ph.D., University of Akron.

Shelstrom, Marc R. (1995); Professor, Industrial Studies, Department of Industrial Studies; B.S., Northwest Missouri State University; M.S., Ph.D., Iowa State University.
Shepherd, Stephen E. (2004); Lecturer, English, Department of Humanities; B.A., M.A., Northern Michigan University; M.F.A., Vermont College.

Sherer, Michael S. (1996); Interim Director, Information Technology; B.S., University of Wisconsin-Platteville.

Shiverick, Sean (2008); Assistant Professor, Psychology, Department of Psychology; B.S., University of Oregon; M.S., Ph.D., University of Wisconsin-Madison.

Short, Michelle (2007); Associate Student Services Specialist, Children's Center; B.S., University of Wisconsin-Platteville.

Shultz, Richard D. (1985); Professor, Electrical Engineering, Department of Electrical Engineering; Dean, College of Engineering, Mathematics and Science; B.S., M.S., University of Illinois-Urbana; Ph.D., Iowa State University. Registered Professional Engineer.

Slowey, Alisha (2009); Interim Associate Residence Hall Manager, Student Housing, Student Affairs; B.S., University of Wisconsin-Platteville.

Smith, Warner K. (2006); Associate Professor, Industrial Studies, Department of Industrial Studies; B.S., M.S., Ph.D., Iowa State University.

Smith, Gary (2005); Outreach Program Manager, Southwest Wisconsin Small Business Development Center, Department of Business and Accounting; B.S., University of California at Los Angeles; M.A., Pepperdine University.

Smith, George E. (1977-83, 1985); Professor, Speech, Department of Performing and Visual Arts; B.S., M.A., Ed.D., Northern Illinois University.

Snyder, Robert J. (2000); Professor, Communication Technologies, Department of Communication Technologies; B.S., University of Wisconsin-Oshkosh; M.A., Ph.D., Ohio University.

Soja, Julia (2006); Director, Children's Center, Student Affairs; B.S., University of Wisconsin-Platteville.

Soja, Scott E. (2000); Associate Student Services Specialist, Intercollegiate Athletics; B.S., California State University-Sonoma; M.Ed., University of Minnesota.

Sola, Marcia J. (2002); Coordinator, International Student Services; B.S., B.A., University of Dubuque; M.S.E., University of Wisconsin-Platteville.

Soley, Kelly J. Sullivan (1998); Senior Development Specialist, University Relations; B.A., St. Louis University; M.A., University of Wisconsin-Madison.

Son, Wonim (2005); Assistant Professor, Education, School of Education; B.A., M.Ed., Sungshin Women's University (Korea); Ph.D., Indiana State University.

Soofi, Abdollah S. (1980); Professor, Economics, Department of Social Sciences; B.S., M.S., California State Polytechnic University-Pomona; Ph.D., University of California-Riverside.

Spellman, Raymond G. (2001); Director, Highway Technician Certification Program; B.S., University of Wisconsin-Platteville.

Spoto, Raymond (1967); Professor, Foreign Languages (Spanish), Department of Humanities; B.A., Northern Illinois University; M.A., University of Tennessee; Ph.D., University of Tennessee.

St. John, W. Doyle (1996); Professor, Engineering Physics, Department of Chemistry and Engineering Physics; B.S., Tulsa University; M.S., Ph.D., Oklahoma State University.

Stankovich, Wendy S. (2004); Lecturer, Biology, Department of Biology; B.S., University of Wisconsin-Platteville; M.S., University of Wisconsin-Milwaukee.

Stanley, Adam C. (2005); Assistant Professor, History, Department of Social Sciences; B.A., Millikin University; M.A., Ph.D., Purdue University.

Stappert, Tonya L. (2000); Senior Information Processing Consultant, Learning Technology Center; B.S., University of Wisconsin-Platteville; M.S., University of Wisconsin-Platteville.

Starling, Thomas J., Jr. (2005); Instrumentation Specialist, College of Engineering, Mathematics and Science; B.S., Northern Arizona University.

Steck, Francis X. (1990); Professor, Industrial Studies, Department of Industrial Studies; B.S., State University of New York at Oswego; M.A., Ph.D., Indiana State University.

Steinback, Thomas R. (2007); Assistant Professor, Business Administration, Department of Business and Accounting; B.A., Ambassador College (England); M.B.A., Syracuse University.

Steiner, Charles (2007); Assistant Professor, Agriculture, School of Agriculture; B.S., M.S., University of Wisconsin-Platteville; Ph.D., Iowa State University.

Steiner, Steven A. (1997); Professor, Chemistry, Department of Chemistry and Engineering Physics; B.S., University of Nebraska, Omaha; M.S., University of Nebraska, Lincoln; Ph.D., University of California, Riverside.

Stephens, Douglas W. (2001); Campus Planner, Physical Plant; B.S., University of Wisconsin-Platteville.

Stipe, Stormy (2004); Assistant Professor, English, Department of Humanities; B.A., Stephens College, M.F.A., Sarah Lawrence College; Ph.D., University of Houston.

Stodola, Thomas G. (1997); Controller; Administrative Services; B.S., University of Wisconsin-Green Bay; M.B.A., University of Dubuque.

Stradford, H. Todd (1997); Associate Professor, Geography, Department of Social Sciences; B.S., St. Lawrence University; M.A., University of Missouri; Ph.D., University of Oklahoma.

Streff, Robert J. (2007); Information Processing Consultant, Distance Learning Center; B.S., M.S., University of Wisconsin-Stout.

Stuckey, Gloria J. (1990); Laboratory Manager, Biology and Social Sciences; B.S., University of Wisconsin-Stout.

Stuttenberg, Mary Joan (2006); Associate Student Services Specialist, Master of Science in Engineering Program, College of Engineering, Mathematics and Science; B.A., Marycrest College.

Swenson, James A. (2005); Assistant Professor, Mathematics, Department of Mathematics; B.A., Augustana College; M.S., Ph.D., University of Minnesota.

Swigart, Christal (2007); Media Specialist, Distance Learning Center, B.S., University of Wisconsin-Platteville.
Tabrizi, Majid T. (1987); Professor, Industrial Studies, Department of Industrial Studies; B.A., Kerman College of Administration and Commerce (Iran); B.E.T., Southwest State University; M.S., University of Wisconsin-Stout; D.I.T., University of Northern Iowa.

Tabrizi, Pusaporn P. (1997); Advisor, Multicultural Educational Resource Center; B.A., Silpakorn University (Thailand); M.S., Minnesota State University at Mankato; M.A., University of Northern Iowa.

Tebbe, Jeffrey J. (2005); Lecturer, Speech, Department of Performing and Visual Arts; B.A., Briar Cliff College, M.S.E., University of Wisconsin-Platteville.

Tembei, John N. (2000); Associate Professor, Agriculture, School of Agriculture; B.S., Iowa State University; M.S., Auburn University; Ph.D., South Dakota State University.

Teng, Hong (2008); Assistant Professor, General Engineering, Department of General Engineering; B.S., East China Normal University (China); M.S., Shanghai Jiao Tong University (China); M.S., Marquette University; Ph.D., University of Illinois at Urbana-Champaign.

Thede, Andrea (2005); Residence Hall Manager, Student Housing, Student Affairs; B.S., University of Wisconsin-La Crosse; M.S.Ed., University of Nebraska at Kearney.

Thomas, Anthony D. (1994); Professor, Mathematics, Department of Mathematics; A.B., Washington University; M.S., Ph.D., Purdue University.

Thompson, Michael K. (2004); Associate Professor, Civil Engineering, Department of Civil and Environmental Engineering; B.S., North Carolina State; M.S., Ph.D., University of Texas-Austin.

Thrun, Jason R. (1998); Professor, Mathematics, Department of Mathematics; B.S., University of Illinois-Urbana; M.S., Ph.D., Northern Illinois University.

Tigerman, Kathleen J. (1993); Associate Professor, English, Department of Humanities; B.S., St. Louis University; M.A., Ph.D., University of Wisconsin-Milwaukee.

Trendt, Diana J. (1999); Interim Director, University Career Planning and Placement Services; B.S., University of Wisconsin-Platteville.

Trewin, Amanda L. (2001); Associate Professor, Biology, Department of Biology; B.S., University of Wisconsin-Platteville; M.S., Ph.D., University of Wisconsin-Milwaukee.

Trotter, Sheila R. (1989); Assistant Director, Financial Aid, Student Affairs; B.S., M.S.E., University of Wisconsin-Platteville.

Tucker, Amanda (2008); Assistant Professor, English, Department of Humanities; B.A., M.A., University of North Texas.

Tucker, Elizabeth (1977); Director, Financial Aid, Student Affairs; B.S., University of Wisconsin-Oshkosh; M.S.E., University of Wisconsin-Platteville.

Tuescher, Kimberly D. (1993); Professor, Counselor Education, School of Education; B.S., M.S.E., University of Wisconsin-Oshkosh; Ph.D., University of Wisconsin-Madison.

Tuescher-Gill, Heidi (2002); Recruitment Manager, Prospective Student Services, Admission and Enrollment Services; B.S., University of Wisconsin-Platteville.

Tuft, Marilyn J. (1968); Professor, Biology, Department of Biology; B.A., Northern Michigan University; M.S., Ph.D., University of Wisconsin-Madison.

Turner, Nancy L. (1990); Professor, History, Department of Social Sciences; Director, University Honors Program; B.A., University of Missouri; M.A., Ph.D., University of Iowa.

Uddin, Zia (2007); Assistant Professor, Mathematics, Department of Mathematics; B.S., University of Idaho; M.S., Ph.D., University of Florida.

Udelhofen, Angela M. (2000); Director, Admission and Enrollment Services, Student Affairs; B.S., M.S., University of Wisconsin-Platteville.

Ul-Haq, Irfan (2005); Associate Professor, Mathematics, Department of Mathematics; M.S., Punjab University (Pakistan); M.S., University of Alabama at Huntsville; Ph.D., University of Alabama at Tuscaloosa.

Van Buren, David P. (1976); Professor, Criminal Justice, Department of Criminal Justice; Associate Vice Chancellor; Dean, School of Graduate Studies; Dean, Confucius Institute; Interim Director, Karrmann Library; B.A., St. Bonaventure University; M.A., Ph.D., State University of New York at Albany.

Van Paemel, Catherine Huff (2001); Lecturer, English, Department of Humanities; B.A., Wartburg College; M.A., University of Northern Iowa.

Vance, Steve R. (1993); Professor, Art, Department of Performing and Visual Arts; B.F.A., Oklahoma State University; M.F.A., School of Visual Arts.

Vance, Tiffany C. (2001); Lecturer, Speech, Department of Visual and Performing Arts; B.A., University of Wisconsin-Platteville; M.F.A., University of Illinois.

Vice, Mari A. (1997); Associate Professor, Geology, Department of Social Sciences; B.A., University of Wisconsin-Oshkosh; M.S., Ph.D., Southern Illinois University.

Viney, Michael A. (1985); Assistant Chancellor for Student Affairs; B.S., M.S.E., University of Wisconsin-Platteville; Ph.D., University of Northern Colorado.

Viney, Rhonda L. (1985); Director, Student Housing, Student Affairs; B.S., M.S.E., University of Wisconsin-Platteville.

Voelz, Richard A. (1992); Senior Counselor, University Counseling Services; B.A., University of Wisconsin-Madison; M.S., University of Wisconsin-Whitewater.

Wagner, Jason (2008); Assistant Coach, Intercollegiate Athletics; B.S., University of Wisconsin-Stevens Point; M.S., California University of Pennsylvania.

Walter, Chris W. (1997); Advisor, Admission and Enrollment Services; Coach, Intercollegiate Athletics; B.A., University of Wisconsin-Madison.

Wang, Judith J. (1992); Lecturer, Psychology, Department of Psychology; B.S., University of Wisconsin-Madison; B.A., M.S.E., University of Wisconsin-Platteville.

Waugh, Richard A. (1978); Professor, Geography and Geology, Department of Social Sciences; B.S., M.A., M.A., University of Missouri-Columbia; Ph.D., University of Wisconsin-Madison.
Weber, Wayne C. (1997); Professor, Biology, Department of Biology; B.S., M.S., Ph.D., Colorado State University.

Wedige, Keri (2004); Outreach Specialist, Continuing Education; A.A., Southwest Wisconsin Technical College; B.S., University of Wisconsin-La Crosse.

Weigl, Cory J. (1999); Administrative Program Specialist, University Farm, School of Agriculture; B.S., M.S.E., University of Wisconsin-Platteville.

Weil, Tyler (2008); Associate Advisor, Graduate Programs in Wuhan, China; B.S., University of Wisconsin-Superior.

Wein, Kory (2005); Assistant Professor, English, Department of Humanities; B.S., University of Wisconsin-Stevens Point; M.A., University of Wisconsin-Eau Claire; Ph.D., Purdue University.

Wendel, Laura C. (1993); Professor, English, Department of Humanities; B.A., University of Wisconsin-Madison; M.A., Ph.D., University of Michigan.

Wesley, Artanya M. (2006); Student Services Coordinator, Student Affairs; B.S., M.S.E., University of Wisconsin-Platteville.

Wesley, Carl Jr. (2007); Retention Coordinator and Pre-College Director; Multicultural Educational Resource Center; B.S., University of Wisconsin-Platteville.

Wietzel, Valerie J. (2001); Assistant Director, Pioneer Student Center and Pioneer Involvement, Student Affairs; B.A., Albion College; M.S.E., University of Wisconsin-La Crosse.

White, Scott A. (1980); Professor, Business Administration, Department of Business and Accounting; B.S., University of Nebraska-Lincoln; J.D., Creighton University.

Wiegman, Kenneth M. (1998); Information Processing Consultant, Information Technology, College of Liberal Arts & Education; B.A., University of Wisconsin-Platteville.

Wiese, James A. (1995); Instrumentation Specialist, College of Engineering, Mathematics and Science; B.S., Marquette University.

Wiley, Carlos A. (2001); Director, Multicultural Educational Resource Center; B.A., Quincy University; M.S.E., University of Wisconsin-Platteville.

Williams, Mary Rose (2005); Associate Professor, Communication Technologies, Department of Communication Technologies; B.A., George Mason University; M.A., Colorado State University; Ph.D., University of Oregon.

Wills, Sheryl L. (1994); Professor, Mathematics, Department of Mathematics; B.S., M.S., Ph.D., Northern Illinois University.

Wilson, D. Joanne (1986); Professor, General Engineering, Department of General Engineering; Executive Director, First Year Experience; B.A., University of California-San Diego; M.S., Ph.D., University of Nebraska-Lincoln.

Wilson, Jerome J. (1989); Senior Lecturer, Physics, Department of Chemistry and Engineering Physics; B.M., University of Wisconsin-Stevens Point; B.S., University of Wisconsin-Superior; M.S., University of Minnesota-Duluth.

Winder, Kaye S. (1986); Associate Professor, Art, Department of Performing and Visual Arts; B.A., M.A., Ph.D., University of Iowa.

Wolfe, Sean R. (2007); Information Processing Consultant, Information Technology; B.A., University of Wisconsin-Platteville.

Wright, Kristopher K. (2001); Associate Professor, Biology, Department of Biology; B.S., University of Wisconsin-Madison; M.S., Ph.D., Oregon State University.

Wruble, Marc K. (1993); Professor, Psychology, Department of Psychology; B.S., Eastern Michigan University; M.S., Ph.D., University of Florida-Gainesville.

Wu, Tsunghsuh (2008); Assistant Professor, Chemistry, Department of Chemistry and Engineering Physics; B.S., Michigan Technological University; Ph.D., Auburn University.

Wubben, Lisa (2008); Assistant Coach, Intercollegiate Athletics; Advisor, Admission and Enrollment Services, Student Affairs; B.S., University of Wisconsin-Platteville.

Wurtzler, Judith M. (1996); Senior Academic Librarian, Karrmann Library; B.S., Edgewood College; M.A., University of Wisconsin-Madison.

Wyse, Phillip O. (1971); Director, Pioneer Farm, School of Agriculture; B.S., M.A.T., University of Wisconsin-Platteville.

Yang, Qi (1995); Associate Professor, Computer Science, Department of Computer Science and Software Engineering; B.S., Sichuan University (China); M.S., Ph.D., University of Illinois-Chicago.

Young, Kay T. (1993); Senior Instructional Specialist, Karrmann Library; B.A., University of Wisconsin-Platteville.

Young, Philip W. (1987); Professor, Physics, Department of Chemistry and Engineering Physics; B.S., Houghton College; M.S., Ph.D., University of Colorado.

Yunck, Steve A. (2008); Assistant Professor, Communication Technologies, Department of Communication Technologies; B.F.A., University of Wisconsin-Stevens Point; M.A., M.F.A., University of Wisconsin-Madison.

Zach, Richard J. (2006); Laboratory Manager, Department of Industrial Studies; B.S., M.S., University of Wisconsin-Platteville.

Zampaloni, Michael A. (2007); Assistant Professor, Mechanical Engineering, Department of Mechanical and Industrial Engineering; B.S., M.S., Ph.D., Michigan State University.

Zauche, Timothy H. (2001); Professor, Chemistry, Department of Chemistry and Engineering Physics; B.S., University of Northern Iowa; Ph.D., Iowa State University.

Zentner, Roderick W. (1990); Associate Professor, Physical Education and Health, School of Education; B.S., M.S., University of Wisconsin-La Crosse; D.Ed., University of Oregon.

Zidon, Mark G. (1990); Professor, Agricultural Industries, School of Agriculture; B.S., M.S., North Dakota State University; Ph.D., Iowa State University.

Zielinski, Matthew (2005); Associate Residence Hall Manager, Student Housing, Student Affairs; B.S., University of Wisconsin-Platteville.
### Emeriti Faculty and Retired Academic Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>John C. Adams</td>
<td>Economics</td>
</tr>
<tr>
<td>Kahtan Al Yasiri</td>
<td>Economics</td>
</tr>
<tr>
<td>Karen Bennett Allen</td>
<td>Education</td>
</tr>
<tr>
<td>John E. Ambrosius</td>
<td>Agriculture Industries</td>
</tr>
<tr>
<td>Harold D. Beals</td>
<td>Agriculture Industries</td>
</tr>
<tr>
<td>Steven Becker</td>
<td>Accounting</td>
</tr>
<tr>
<td>Shirley C. Beighley</td>
<td>Student Services</td>
</tr>
<tr>
<td>F. Gerald Bench</td>
<td>Speech</td>
</tr>
<tr>
<td>Ralph Bjork</td>
<td>Computer Science</td>
</tr>
<tr>
<td>M. Ronald Bottaccini</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Stephanie R. Branson</td>
<td>English</td>
</tr>
<tr>
<td>John Brodel</td>
<td>Business Administration</td>
</tr>
<tr>
<td>Howard Brooks</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>Gayle G. Bull</td>
<td>Administrative Services</td>
</tr>
<tr>
<td>George Bullis</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Bill M. Bumgardner</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>Russell E. Burgett</td>
<td>Education</td>
</tr>
<tr>
<td>Edward O. Busby</td>
<td>Engineering</td>
</tr>
<tr>
<td>Kenneth Buttry</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>Robert L. Campbell</td>
<td>Agricultural Industries</td>
</tr>
<tr>
<td>William L. Campbell</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Warren Carrier</td>
<td>Administration</td>
</tr>
<tr>
<td>Walter Chmielewski</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Patricia C. Collins</td>
<td>Physical Education and Health</td>
</tr>
<tr>
<td>Thomas P. Collins</td>
<td>Theater</td>
</tr>
<tr>
<td>John E. Cottingham</td>
<td>Agricultural Industries</td>
</tr>
<tr>
<td>Ralph W. Curtis</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Gerald Darrow</td>
<td>Music</td>
</tr>
<tr>
<td>Edward Deneen</td>
<td>Registrar</td>
</tr>
<tr>
<td>William J. Dennis</td>
<td>Music</td>
</tr>
<tr>
<td>Peter DiMeglio</td>
<td>History</td>
</tr>
<tr>
<td>Fred E. Domann</td>
<td>Engineering Physics</td>
</tr>
<tr>
<td>Maria Reese Drake</td>
<td>Financial Aid</td>
</tr>
<tr>
<td>Evelyn M. Duesbury</td>
<td>Accounting</td>
</tr>
<tr>
<td>Francis F. Dunn</td>
<td>Auxiliary Services</td>
</tr>
<tr>
<td>Jay N. Dykstra</td>
<td>Biology</td>
</tr>
<tr>
<td>Fred S. Eberlein</td>
<td>Physical Education and Health</td>
</tr>
<tr>
<td>William C. Ehrenman</td>
<td>Counselor Education</td>
</tr>
<tr>
<td>Frank Eshelman</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Dale Fatzinger</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Harold Fenrick</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Ross Fiedler</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Robert Foulkes</td>
<td>Biology</td>
</tr>
<tr>
<td>Barbara A. Gates</td>
<td>Physical Education and Health</td>
</tr>
<tr>
<td>Thomas Goltry</td>
<td>Theater</td>
</tr>
<tr>
<td>Marilyn Gottschalk</td>
<td>English</td>
</tr>
<tr>
<td>Roger E. Gottschalk</td>
<td>Art</td>
</tr>
<tr>
<td>Richard Graney</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Merlyn D. Gray</td>
<td>Mathematics</td>
</tr>
<tr>
<td>William Hamshire</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Walter T. Hannan</td>
<td>Campus Planning</td>
</tr>
<tr>
<td>Robert Hansen</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Roger Hauser</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>Charles J. Heidenreich</td>
<td>Agricultural Sciences</td>
</tr>
<tr>
<td>Thomas P. Hickey</td>
<td>English</td>
</tr>
<tr>
<td>Roger Higgs</td>
<td>Agriculture</td>
</tr>
<tr>
<td>James R. Holler</td>
<td>Biology</td>
</tr>
<tr>
<td>C. Ellsworth Hood</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Roger Hoover</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>Kathleen Iselin</td>
<td>Children's Center</td>
</tr>
<tr>
<td>Alva H. Jared</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>Nicholas A. Johansen</td>
<td>Counselor Education</td>
</tr>
<tr>
<td>Thomas J. Jonas</td>
<td>Speech</td>
</tr>
<tr>
<td>Kenneth G. Kamps</td>
<td>Education</td>
</tr>
<tr>
<td>Barbara H. Karrmann</td>
<td>Admissions and Enrollment Management</td>
</tr>
<tr>
<td>Kenneth C. Kilian</td>
<td>Agricultural Sciences</td>
</tr>
<tr>
<td>Deborah Kinder</td>
<td>English</td>
</tr>
<tr>
<td>Jack Kirby</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>William E. Kissner</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>Dwight Klaassen</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Richard A. Klawiter</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>Eugene Korb</td>
<td>Engineering</td>
</tr>
<tr>
<td>Carol Lange</td>
<td>Education</td>
</tr>
<tr>
<td>Lang Wah Lee</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Deborah A. Lewis</td>
<td>English</td>
</tr>
<tr>
<td>Michael E. Lewis</td>
<td>Music</td>
</tr>
<tr>
<td>Robert Lind</td>
<td>Physics</td>
</tr>
<tr>
<td>Thomas Lindahl</td>
<td>Agriculture</td>
</tr>
<tr>
<td>Lloyd L. Linden</td>
<td>Student Affairs</td>
</tr>
<tr>
<td>Frank J. Lofy</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>Gediminas Marchertas</td>
<td>Foreign Languages</td>
</tr>
<tr>
<td>David J. Markee</td>
<td>Administration</td>
</tr>
<tr>
<td>Earl McCullough</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>William G. Melville</td>
<td>Education</td>
</tr>
<tr>
<td>Name</td>
<td>Department</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Alvin Menninga</td>
<td>English</td>
</tr>
<tr>
<td>Joyce Miller</td>
<td>Chemistry</td>
</tr>
<tr>
<td>William K. Miller</td>
<td>Psychology</td>
</tr>
<tr>
<td>Milton Mitchell</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Dean Michael Molitor</td>
<td>Biology</td>
</tr>
<tr>
<td>Edwin E. Moore</td>
<td>Education</td>
</tr>
<tr>
<td>Stanley R. Moore</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Judith E. Moriarty</td>
<td>Library Services</td>
</tr>
<tr>
<td>Paul Moriarty</td>
<td>Information Services</td>
</tr>
<tr>
<td>Robert M. Morphew</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Thomas A. Morris</td>
<td>Counselor Education</td>
</tr>
<tr>
<td>Calvin L. Myrbo</td>
<td>English</td>
</tr>
<tr>
<td>Robert P. Nusbaum</td>
<td>Agricultural Sciences</td>
</tr>
<tr>
<td>David Olson</td>
<td>Physical Facilities</td>
</tr>
<tr>
<td>John O’Neill</td>
<td>Communication Technologies</td>
</tr>
<tr>
<td>Fred Oomens</td>
<td>Agriculture</td>
</tr>
<tr>
<td>Marjon Ornstein</td>
<td>Foreign Languages</td>
</tr>
<tr>
<td>Jerry D. Oxenford</td>
<td>Business Administration</td>
</tr>
<tr>
<td>Gianfranco Pagnucci</td>
<td>English</td>
</tr>
<tr>
<td>Susan Pagnucci</td>
<td>English</td>
</tr>
<tr>
<td>Orrie Paller</td>
<td>Business Administration</td>
</tr>
<tr>
<td>Dennis Palmer</td>
<td>Auxiliary Services</td>
</tr>
<tr>
<td>Barbara Parsons</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Judith E. Paul</td>
<td>Business Administration</td>
</tr>
<tr>
<td>Robert Phillips</td>
<td>Geography</td>
</tr>
<tr>
<td>Bill Potts</td>
<td>Accounting</td>
</tr>
<tr>
<td>Norman Powers</td>
<td>Engineering</td>
</tr>
<tr>
<td>Virgil R. Pufahl</td>
<td>Communication Technologies</td>
</tr>
<tr>
<td>Willard Pulkrabek</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Jesse G. Reinstein</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Joan Rekstad</td>
<td>Education</td>
</tr>
<tr>
<td>Gloria Rezazadeh</td>
<td>Library Services</td>
</tr>
<tr>
<td>Reza Rezazadeh</td>
<td>Political Science</td>
</tr>
<tr>
<td>Allan Richert</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Joshua F. Robinson</td>
<td>Economics</td>
</tr>
<tr>
<td>Dolores Rock</td>
<td>Hutcheson Education</td>
</tr>
<tr>
<td>Perry J. Rockwell</td>
<td>Counselor Education</td>
</tr>
<tr>
<td>James M. Ross</td>
<td>Art</td>
</tr>
<tr>
<td>John Runde</td>
<td>Student Affairs</td>
</tr>
<tr>
<td>Charles SaLoutos</td>
<td>Education</td>
</tr>
<tr>
<td>Jean Sanders</td>
<td>Mathematics</td>
</tr>
<tr>
<td>William Sanders</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Carol Sands</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Philip Sands</td>
<td>Industrial Engineering</td>
</tr>
<tr>
<td>Gerald J. Scheppers</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Charles Schilling</td>
<td>Business Administration</td>
</tr>
<tr>
<td>William Schilling</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>John P. Schreiber</td>
<td>Administrative Services</td>
</tr>
<tr>
<td>Richard Schumacher</td>
<td>Admissions and Enrollment Management</td>
</tr>
<tr>
<td>Bryan L. Schwark</td>
<td>Library Services</td>
</tr>
<tr>
<td>Roy Shaver</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Ray E. Short</td>
<td>Sociology</td>
</tr>
<tr>
<td>Kenneth Shubak</td>
<td>Geology</td>
</tr>
<tr>
<td>John Simonson</td>
<td>Economics</td>
</tr>
<tr>
<td>Laurel A. Skrede</td>
<td>Campus Police</td>
</tr>
<tr>
<td>Roy Smith</td>
<td>Physics</td>
</tr>
<tr>
<td>Robert Sommer</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Sandra Spofford</td>
<td>Counseling Services</td>
</tr>
<tr>
<td>William Spofford</td>
<td>Study Abroad</td>
</tr>
<tr>
<td>Sally Standiford</td>
<td>Liberal Arts and Education</td>
</tr>
<tr>
<td>Gloria Stephenson</td>
<td>English</td>
</tr>
<tr>
<td>William Stindt</td>
<td>Administrative Services</td>
</tr>
<tr>
<td>Robert Stone</td>
<td>Education</td>
</tr>
<tr>
<td>Jerry L. Strohm</td>
<td>Biology</td>
</tr>
<tr>
<td>Frank Studnicka</td>
<td>Geography</td>
</tr>
<tr>
<td>DuWayne Stuelke</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>Bheru Sukhwal</td>
<td>Geography</td>
</tr>
<tr>
<td>Charles Sundin</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Shiv Tandon</td>
<td>Biology</td>
</tr>
<tr>
<td>Joseph Thomas</td>
<td>Industrial Studies</td>
</tr>
<tr>
<td>Dawson Trine</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Frederic Tuft</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Jamir Uddin</td>
<td>Accounting</td>
</tr>
<tr>
<td>V. John Vacca</td>
<td>English</td>
</tr>
<tr>
<td>Thomas Vail</td>
<td>Physical Education and Health</td>
</tr>
<tr>
<td>James K. Valaskey</td>
<td>Physical Plant</td>
</tr>
<tr>
<td>Robert I. Velzy</td>
<td>Psychology</td>
</tr>
<tr>
<td>Don M. Verger</td>
<td>Psychology</td>
</tr>
<tr>
<td>L. Dale Vertein</td>
<td>Education</td>
</tr>
<tr>
<td>Vernon Vradenburg</td>
<td>Physical Education and Health</td>
</tr>
<tr>
<td>Richard Wadewitz</td>
<td>Physical Education and Health</td>
</tr>
<tr>
<td>Russel O. Wagner</td>
<td>Biology</td>
</tr>
<tr>
<td>Yang Ling (Dave) Wang</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>Robert Warfield</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>Thomas Waters</td>
<td>Political Science</td>
</tr>
<tr>
<td>Richard Wetzel</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>Marlys J. Williams</td>
<td>English</td>
</tr>
<tr>
<td>Kathryn A. Winz</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>Betty J. Wruck</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Stephen Zielke</td>
<td>Administration</td>
</tr>
<tr>
<td>David L. Zierath</td>
<td>Sociology</td>
</tr>
</tbody>
</table>

307
Chancellor’s Cabinet
Spring 2009

David J. Markee  Chancellor

Laura Anderson  Assistant Dean, College of Liberal Arts and Education
Kevin Bernhardt  Director, Pioneer Academic Center for Community Engagement
Alison Bunte  Director, School of Education
Carol Sue Butts  Provost and Vice Chancellor for Academic Affairs
Michael Compton  Director, School of Agriculture
Dennis Cooley  Assistant Chancellor for Advancement/Development
Robert Cramer  Assistant Chancellor for Administrative Services
Barbara Daus  Special Assistant to the Chancellor and Executive Director of International Programs
Pete Davis  Interim Director, Physical Plant
Dawn Drake  Executive Director, Alternative Delivery Systems
Shane Drefcinski  Director of General Education/Assessment Coordinator
Rich Egley  Dean of Students
Duane Ford  Dean, College of Business, Industry, Life Science and Agriculture
Kate Kelley  Director, Personnel and Affirmative Action
David Kieckhafer  Registrar
Mark Mailloux  Institutional Research Manager
Jodi McDermott  Assistant Dean, College of Business, Industry, Life Science and Agriculture
James Mueller  Executive Director of Auxiliary Services
Mittie Nimocks  Dean, College of Liberal Arts and Education
Lisa Riedle  Associate Dean, College of Engineering, Mathematics and Science
Kim Schmelz  Alumni Coordinator
Mike Sherer  Interim Director, Information Technology
Rich Shultz  Dean, College of Engineering, Mathematics and Science
Angela Udelhofen  Director, Admissions and Enrollment Services
David Van Buren  Associate Vice Chancellor/Dean of Graduate Studies and Dean of the Confucius Institute
Mick Viney  Assistant Chancellor for Student Affairs
Carlos Wiley  Director, Multicultural Educational Resource Center
Joanne Wilson  Director, First Year Experience
Joyce Burkholder  Recording Secretary
UW SYSTEM ADMINISTRATION

UNIVERSITY OF WISCONSIN ADMINISTRATORS

Kevin P. Reilly, President

Thomas K. Anderes, Senior Vice President for Administration and Fiscal Affairs

Rebecca Martin, Senior Vice President for Academic Affairs

Deborah A. Durcan, Vice President for Finance

Patricia Brady, General Counsel

BOARD OF REGENTS

Jeffrey Bartell, Madison

Mark J. Bradley, Wausau (Regent President)

Elizabeth Burmaster, Madison

Eileen Connolly-Keesler, Neenah

Judith V. Crain, Green Bay

Mary Quinnette Cuene, Green Bay

Danae Davis, Milwaukee

John Drew, Milwaukee

Michael J. Falbo, Milwaukee

Thomas Loftus, Sun Prairie

Kevin Opgenorth, Platteville (Nontraditional Student Regent)

Charles Pruitt, Milwaukee (Regent Vice President)

Brent Smith, La Crosse

Michael J. Spector, Milwaukee

Colleene P. Thomas, Madison (Student Regent)

José F. Vásquez, Milwaukee

David G. Walsh, Madison

Betty Womack, Brown Deer
A Definition Primer for University Students

We at the university use the following terms on a daily basis in describing academics and situations surrounding those we serve. We take the language we use for granted because we generally understand the terminology. If you already know our lingo, disregard this glossary of terms.

Academic Bankruptcy
Students who transfer from one UW-Platteville program to another may be granted the option to have their academic record adjusted. Students wishing to file academic bankruptcy must do so within one semester of the change of major. For specific instructions, students are requested to contact the Office of the Registrar.

Academic Year
The period from September to December, January through May in which classes are in session. Each of these periods is called a semester.

Add and Drop
This is a process designed for the purpose of changing a course schedule. The student visits the Office of the Registrar and "Drops" the class not wanted, and "Adds" the class desired.

Advising
The process of providing a student with the most complete, current information related to university life. This may include, but is not limited to, information in the areas of academics, resident life, financial planning, career planning and special events.

Bachelor’s Degree
The degree received AFTER completing a specific program of undergraduate study as well as the completion of all graduation requirements.

Certification
The recognition by an outside organization of fulfillment of requirements to meet a professional standard.

Class Load
The number of credit hours carried by a student in any given semester or session.

Class Standing
A measurement of academic achievement based on the number of credit hours earned. For example, students with 90 or more credits are seniors, juniors have 60 or more credits and sophomores have at least 30 credits.

College Parallel Program
A program of study offered at some Wisconsin technical colleges, or at a recognized technical college from another state. Courses in these programs have been identified in advance of transfer by the university and the technical college.

College/School/Department
The university is comprised of three colleges, two schools and a host of departments. Generally speaking, colleges, schools and departments are the administrative units responsible for the fiscal and academic concerns of the university. The Chancellor is the Chief Executive Officer of the university, the Provost is the head of academic affairs, academic deans are the administrative heads of their respective colleges and department chairs/directors are the administrative heads of their respective areas.

Corequisite
A course that must be taken at the same time as another course.

Credit Hour
A measure of academic duration. A one credit hour course generally represents one hour of class participation per week. A three credit course means three hours of class participation per week.

Credit Load
The number of credits a student carries during a semester.

Dean
A university administrator, usually a member of the faculty, who serves as the administrative head of a college.

Degree Program
A planned and approved program of study leading to a bachelor’s degree.

Elective
A course chosen by the student but not considered as part of the explicit requirements of the student’s course work. Students may choose electives in their major as well as in general education courses.

Emphasis
A designated group of courses within a degree program that provides students increased exposure directed toward their major area of study.

Full Time Student
An undergraduate student enrolling for at least 12 or more semester credits during the fall and spring semester. Generally speaking, students who carry less than 12 semester credits per semester may not be covered under their parents’ health insurance policy. Summer session students are considered full time with 6 or more semester credits.

General Education Requirement
A component of a degree program which is designed to provide a broad-based education and competency, to include English, speech, mathematics, physical education, the humanities, the fine arts, historical perspectives, social sciences, natural sciences, ethnic/gender studies, international studies and foreign languages.
Good Standing
A student in good standing is one who has maintained an academic record that meets the established UW-Platteville policy. Students in good standing may continue at the university, return to the university, or transfer to another institution. The grade point necessary to remain in good standing after one semester of attendance is 1.60. After the second and third semesters of attendance, a student must have a cumulative GPA of 1.80 or higher.

Grade Point
The numerical value given to letter grades. At UW-Platteville, we are on a 4.00 system wherein an “A” has a numeric value of 4.00, a “B” has a 3.00 value, etc.

Grade Point Average (GPA)
The numeric value assigned to the earned letter grade for each class taken. The GPA is determined by dividing the total grade points by the total credit hours attempted.

Grant
Financial assistance that does not have to be repaid.

Incomplete
The grade assigned when the student is temporarily unable to complete course requirements because of unusual circumstances. The student must complete the course requirements within nine weeks of the next semester of attendance or the Incomplete grade will become an “F” grade.

Independent Study
A course designed by a student and an instructor which is generally taken outside the “normal” classroom setting.

Internship
Supervised work in a company or agency related to a student’s degree program and career plans. An internship is usually taken for academic credit and often for remuneration.

Matriculate
Students who have matriculated have been officially admitted to the university and are degree seeking students.

Major
A planned program of academic study chosen as a field of specialization leading to a bachelor’s degree. This term is often used interchangeably with the degree program.

Minor
A sequence of related courses consisting of 24 or more semester hours of credit.

Pioneer Passport
Your UWP identification (I.D.) card is called the Pioneer Passport. This card functions as your meal access card for dining services if you are participating in a meal plan.

Pioneer Planner/Student Handbook
The Student Handbook contains policies, procedures and a HELP directory for services as well as a day planner and schedule. This Handbook is free for all students at the University Textbook Center located in Doudna Hall.

Practicum
Supervised work experience related to a program of study. The student generally pays tuition for this opportunity.

Prerequisite
A course or experience that must be successfully completed before enrollment in a designated course.

Probation, Academic
A condition of university attendance whereby students are permitted to remain with the understanding they meet established academic standards within a set period of time. Failure to meet the standard generally results in dismissal from the university.

Reentry
An enrollment procedure for students who were previously enrolled at UW-Platteville, left for a time period, and wish to continue their studies.

Registration
The process of being advised, selecting courses appropriate to the student’s academic goals, and officially establishing a course load and schedule sanctioned by the advisor.

Reserve
When a book is on reserve, it means that the book cannot be removed from the “reserve room” or may be borrowed only for a short period of time. This process is usually done when the library has only a few copies of the book and it is required reading for a particular class.

Semester/Session
A unit of time, generally 13-16 weeks in duration. UW-Platteville has two semesters (fall and spring), and a summer session which is eight weeks in duration.

Special Student
A student who has not matriculated as a degree seeking student but has chosen selected courses for the purpose of investigation.

Student Conduct Code
Chapter 17: This is the state statute that governs student conduct at the university. It specifies conduct which is prohibited, provides sanctions for those who are found to have violated the code and describes the disciplinary process.
Chapter 14: This is the state statute that governs student academic misconduct at the university. It describes academic misconduct, provides sanctions for those who are found to have engaged in academic misconduct and describes the disciplinary process.
Chapter 18: This is the state statute that governs student conduct on university grounds. It describes misconduct and provides sanctions for those who are found to have engaged in misconduct on university land.

Suspension
To be excluded from the university as a penalty for failure to meet academic or behavioral standards.

Teaching Major/Minor
A state Department of Public Instruction approved program for teacher certification for teaching at the elementary, middle or secondary school level.
Transcript
The official record of a student's permanent academic record.

Transfer Credit
Academic credit earned at another institution and accepted toward a degree or program at UW-Platteville.

Tuition and Fees
Tuition is the monetary remuneration for courses taken. Fees are separate and are for the purpose of parking, residence halls fees, meal plan fees, special events, approved building projects, etc.
Index

Academic Bankruptcy ............................................. 23
Academic Load .................................................... 18
Academic Probation and Suspension .................. 24
Academic Staff .................................................. 292
Academic Year .................................................... 310
Accounting ....................................................... 80
Accounting Courses ........................................... 183
ACES Center ...................................................... 47
Add and Drop ..................................................... 310
Administration, UW System ................................ 309
Admission & Academic Appeals
Committee ........................................................... 25
Admission Categories ......................................... 8
Admission, Freshmen ............................................ 9
Admission, International Students ...................... 11
Admission, Transfer Students ............................... 9
Admission to Student Teaching ............................ 171
Admission to General Engineering ...................... 116
Advanced Credit, Veterans .................................... 17
Advanced Placement Examinations (AP) ............... 13
Advising ............................................................. 10, 47
Affirmative Action Statement ............................. 5
Agribusiness ....................................................... 56
Agriculture, School of ......................................... 54
Agricultural Education .......................................... 58
Agricultural Industry Courses .............................. 184
Agricultural Science Courses ............................... 186
Animal Science .................................................... 61
Applied Music Courses ........................................ 259
Art ................................................................. 132
Art Courses ....................................................... 191
Associate's Degree ............................................. 25
Athletics ............................................................. 47
Attendance .......................................................... 22
Auditing Courses ............................................... 19
Bachelor's Degree ............................................. 26
Bachelor's Degree, Second .................................... 26
Biochemistry ....................................................... 99
Biology .............................................................. 72
Biology Courses .................................................. 194
Biotechnology ..................................................... 77
Board of Regents, UW System ................................ 310
Botany ............................................................ 75
Broad Field Science ........................................... 103
Broadcast Production .......................................... 85
Building Construction Management .................... 91
Business Administration ...................................... 81, 83
Business Administration Courses ....................... 198
Campus Employment .......................................... 27
Campus Visits ................................................... 5
Career Center ..................................................... 47
Certification ........................................................ 310
Center for the Arts ............................................... 47
Changing Majors .................................................. 23
Chemistry ........................................................... 98
Chemistry Courses .............................................. 202
Children's Center ............................................... 47
Civil Engineering ............................................... 106
Civil Engineering Courses ................................... 205
Class Attendance .................................................. 22
Class Standing ..................................................... 310
College Level Examination Programs (CLEP) ... 16
College of Business, Industry, Life Science and Agriculture 53
College of Engineering, Mathematics and Science 95
College of Liberal Arts and Education .................. 126
Colleges ............................................................ 53
Computer Labs and Resources ............................ 45
Computer Science ............................................. 109
Computer Science Courses .................................. 213
Computer Science and Software
Engineering ....................................................... 109
Communication Technologies Courses ............. 209
Communication Technologies ............................ 84
Continuing Education ......................................... 42
Cooperative Education Programs .......................... 42
Corequisite ....................................................... 310
Counseling Services ............................................ 48
Counselor Education ........................................... 178
Counselor Education Courses .............................. 215
Course Changes ................................................. 19
Course Codes ..................................................... 182
Course Numbering ............................................. 18, 182
Course Waivers ................................................... 17
Credit Hour ........................................................ 310
Credit Load ........................................................ 310
Criminal Justice ................................................. 128
Criminal Justice Courses ..................................... 216
Criminalistics ..................................................... 129
Cytotechnology .................................................. 75
Dean ............................................................... 310
Degree Program .................................................. 310
Dining Services .................................................... 48
Discipline Committee, Appeal Tribunal .............. 25
Double Majors ..................................................... 23
Dropping Courses .............................................. 20
Early childhood/adolescence ............................. 177
Economics .......................................................... 155
Economics Courses ............................................. 219
Education, Approved Programs and Majors ........... 171
Education, Early Adolescence/Adolescence .......... 176
Education, Early Childhood/Middle Childhood ...... 174
Education, Early Adolescence .............................. 175
Education Office of Special Programs ................. 170
Education, Physical ............................................. 270
Education, School of .......................................... 169
Education, Teacher ............................................ 173
Elective ............................................................. 310
Electrical Engineering ......................................... 113
Electrical Engineering Courses ......................... 221
Eligibility, Transfer Student ................................. 9
Emeriti Faculty .................................................... 306
Emphasis ............................................................. 310
Energy Courses .................................................... 224
Engineering Admissions and Academic Standards Committee 96
Engineering, Civil .............................................. 106
Engineering, Electrical ....................................... 113
Engineering, Environmental ............................... 108
Engineering, General ......................................... 116
Engineering, Industrial ....................................... 122
Engineering, Mechanical ................................... 124
Engineering Physics .......................................... 100
Engineering Physics Courses .............................. 230
Engineering Policies and Procedures ................. 96
English .............................................................. 143
English Courses ................................................. 224
English, Remedial .............................................. 43
Environmental Science ....................................... 159
Environmental Engineering ............................... 108
Equal Opportunity Statement ............................ 5
Ethnic Studies ..................................................... 131
Ethnic Studies Courses ....................................... 232
Excess Credit Policy ............................................ 20
Facilities ............................................................ 6
Faculty .............................................................. 6, 306
Finance ............................................................. 81
Financial Aid ...................................................... 27
Food Marketing .................................................... 81
Foreign Language Certificate ............................ 148
Foreign Languages .............................................. 147
Free Application for Federal Student Aid (FAFSA) .. 27
French .............................................................. 149
French Courses .................................................... 234
Freshmen Honors Program .................................. 38
Freshman Scholarships ....................................... 28
Freshmen Admits ................................................. 9
Full Time Student ............................................... 310
General Education Credit Requirements/Course Listing 29-37
General Education Philosophy ......................... 29
General Education Approved Course Listings .......... 32
General Engineering ............................................ 116
General Engineering Courses ............................. 235
Geography ........................................................ 157
Geography Courses ............................................ 236
Geology ............................................................ 159
Geology Courses ................................................. 240
German ............................................................. 149
German Courses ............................................... 241
Glossary, University ........................................... 310
Good Standing ..................................................... 311
Grade Point ........................................................ 311
Grade Point Average (GPA) ............................... 311
Grades ............................................................... 22
Graduate Courses, Undergraduates
Enrolled in ........................................................ 21
Graduation ......................................................... 26
Grants ............................................................... 27
313
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grievances, Students</td>
<td>25</td>
</tr>
<tr>
<td>Health, Physical Education</td>
<td>179</td>
</tr>
<tr>
<td>High Honors</td>
<td>22</td>
</tr>
<tr>
<td>High School Special Students</td>
<td>8</td>
</tr>
<tr>
<td>History</td>
<td>160</td>
</tr>
<tr>
<td>History Courses</td>
<td>241</td>
</tr>
<tr>
<td>History, UW-P</td>
<td>7</td>
</tr>
<tr>
<td>Home-Schooled Student Admission</td>
<td>9</td>
</tr>
<tr>
<td>Honors Program, University</td>
<td>38</td>
</tr>
<tr>
<td>Honors, Scholar</td>
<td>22</td>
</tr>
<tr>
<td>Housing Policy</td>
<td>50</td>
</tr>
<tr>
<td>Housing, Off-Campus</td>
<td>50</td>
</tr>
<tr>
<td>Housing, On-Campus</td>
<td>50</td>
</tr>
<tr>
<td>Humanities</td>
<td>142</td>
</tr>
<tr>
<td>Human Resources Management</td>
<td>81</td>
</tr>
<tr>
<td>Imaging Media</td>
<td>85</td>
</tr>
<tr>
<td>Incomplete</td>
<td>311</td>
</tr>
<tr>
<td>Independent Study</td>
<td>311</td>
</tr>
<tr>
<td>Individually Contracted Major</td>
<td>44</td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>122</td>
</tr>
<tr>
<td>Industrial Engineering Courses</td>
<td>245</td>
</tr>
<tr>
<td>Industrial Technology Management</td>
<td>89</td>
</tr>
<tr>
<td>Industrial Studies</td>
<td>88</td>
</tr>
<tr>
<td>Industrial Studies Courses</td>
<td>247</td>
</tr>
<tr>
<td>Information Services</td>
<td>45</td>
</tr>
<tr>
<td>Installment Payment Plan</td>
<td>19</td>
</tr>
<tr>
<td>Institute for Study Abroad Programs</td>
<td>42</td>
</tr>
<tr>
<td>International Students</td>
<td>11</td>
</tr>
<tr>
<td>Internship</td>
<td>162</td>
</tr>
<tr>
<td>International Studies</td>
<td>311</td>
</tr>
<tr>
<td>Intramurals</td>
<td>49</td>
</tr>
<tr>
<td>Journalism</td>
<td>86</td>
</tr>
<tr>
<td>Karrmann Library</td>
<td>45</td>
</tr>
<tr>
<td>Late Fee</td>
<td>20</td>
</tr>
<tr>
<td>Learning Technology Center</td>
<td>46</td>
</tr>
<tr>
<td>Liberal Arts Areas</td>
<td>30</td>
</tr>
<tr>
<td>Library</td>
<td>45</td>
</tr>
<tr>
<td>Loans</td>
<td>27</td>
</tr>
<tr>
<td>“M”</td>
<td>7</td>
</tr>
<tr>
<td>Major</td>
<td>311</td>
</tr>
<tr>
<td>Major, Declaring</td>
<td>23</td>
</tr>
<tr>
<td>Major, Changing</td>
<td>23</td>
</tr>
<tr>
<td>Majors, Double</td>
<td>23</td>
</tr>
<tr>
<td>Management</td>
<td>82</td>
</tr>
<tr>
<td>Manufacturing Technology</td>
<td>92</td>
</tr>
<tr>
<td>Mathematics</td>
<td>119</td>
</tr>
<tr>
<td>Mathematics Courses</td>
<td>252</td>
</tr>
<tr>
<td>Math, Remedial</td>
<td>43</td>
</tr>
<tr>
<td>Matriculate</td>
<td>311</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>122</td>
</tr>
<tr>
<td>Mechanical Engineering Courses</td>
<td>255</td>
</tr>
<tr>
<td>Media Technology Services</td>
<td>46</td>
</tr>
<tr>
<td>Minor</td>
<td>311</td>
</tr>
<tr>
<td>Mission Statement, UW-Platteville</td>
<td>6</td>
</tr>
<tr>
<td>Multicultural Educational Resource Center (MERC)</td>
<td>49</td>
</tr>
<tr>
<td>Music</td>
<td>135</td>
</tr>
<tr>
<td>Music Courses</td>
<td>259</td>
</tr>
<tr>
<td>National Student Exchange Program</td>
<td>42</td>
</tr>
<tr>
<td>Non-traditional Students</td>
<td>8</td>
</tr>
<tr>
<td>Occupational Safety Management</td>
<td>92</td>
</tr>
<tr>
<td>Orientation, New Student</td>
<td>5</td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td>63</td>
</tr>
<tr>
<td>Pass-Fail System</td>
<td>19</td>
</tr>
<tr>
<td>Payment Policy</td>
<td>19</td>
</tr>
<tr>
<td>Performing and Visual Arts</td>
<td>132</td>
</tr>
<tr>
<td>Performing Arts Series</td>
<td>49</td>
</tr>
<tr>
<td>Philosophy</td>
<td>151</td>
</tr>
<tr>
<td>Physical Education Courses</td>
<td>267</td>
</tr>
<tr>
<td>Physical Education, Health</td>
<td>179</td>
</tr>
<tr>
<td>Physical Science Courses</td>
<td>266</td>
</tr>
<tr>
<td>Physics</td>
<td>100</td>
</tr>
<tr>
<td>Physics Courses</td>
<td>272</td>
</tr>
<tr>
<td>Pioneer Activity Center (PAC)</td>
<td>49</td>
</tr>
<tr>
<td>Pioneer Involvement Center (PIC)</td>
<td>50</td>
</tr>
<tr>
<td>Pioneer Passport</td>
<td>311</td>
</tr>
<tr>
<td>Pioneer Student Center</td>
<td>50</td>
</tr>
<tr>
<td>Platteville Community</td>
<td>7</td>
</tr>
<tr>
<td>Political Science</td>
<td>163</td>
</tr>
<tr>
<td>Political Science Courses</td>
<td>272</td>
</tr>
<tr>
<td>Practicum</td>
<td>311</td>
</tr>
<tr>
<td>Pre-Chiropractic</td>
<td>39</td>
</tr>
<tr>
<td>Pre-Cytotechnology</td>
<td>39</td>
</tr>
<tr>
<td>Pre-Dentistry</td>
<td>39</td>
</tr>
<tr>
<td>Pre-Law</td>
<td>39</td>
</tr>
<tr>
<td>Pre-Medical Technology</td>
<td>40</td>
</tr>
<tr>
<td>Pre-Medicine</td>
<td>40</td>
</tr>
<tr>
<td>Pre-Ministry</td>
<td>40</td>
</tr>
<tr>
<td>Pre-Nursing</td>
<td>40</td>
</tr>
<tr>
<td>Pre-Occupational Therapy</td>
<td>40</td>
</tr>
<tr>
<td>Pre-Optometry</td>
<td>41</td>
</tr>
<tr>
<td>Pre-Osteopathy</td>
<td>41</td>
</tr>
<tr>
<td>Pre-Pharmacy</td>
<td>41</td>
</tr>
<tr>
<td>Pre-Physical Therapy</td>
<td>41</td>
</tr>
<tr>
<td>Pre-Physician Assistant</td>
<td>41</td>
</tr>
<tr>
<td>Pre-Podiatry</td>
<td>41</td>
</tr>
<tr>
<td>Pre-Professional Programs</td>
<td>39</td>
</tr>
<tr>
<td>Pre-Veterinary Medicine</td>
<td>42</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>311</td>
</tr>
<tr>
<td>Probation, Academic</td>
<td>24</td>
</tr>
<tr>
<td>Psychology</td>
<td>153</td>
</tr>
<tr>
<td>Psychology Courses</td>
<td>274</td>
</tr>
<tr>
<td>Reclamation</td>
<td>66</td>
</tr>
<tr>
<td>Reclamation Courses</td>
<td>277</td>
</tr>
<tr>
<td>Reentry</td>
<td>11</td>
</tr>
<tr>
<td>Reentry Students</td>
<td>8</td>
</tr>
<tr>
<td>Refund Policy, University</td>
<td>20</td>
</tr>
<tr>
<td>Registration, Continuing and Transfer Students</td>
<td>18</td>
</tr>
<tr>
<td>Registration, Freshmen</td>
<td>18</td>
</tr>
<tr>
<td>Registration, Policies</td>
<td>18</td>
</tr>
<tr>
<td>Remedial Courses in English and Mathematics</td>
<td>43</td>
</tr>
<tr>
<td>Requirements, Competency</td>
<td>29, 30</td>
</tr>
<tr>
<td>Requirements, General Education</td>
<td>29</td>
</tr>
<tr>
<td>Requirements, Liberal Arts</td>
<td>30</td>
</tr>
<tr>
<td>Residence Halls</td>
<td>50</td>
</tr>
<tr>
<td>Safety and Health Policy</td>
<td>6</td>
</tr>
<tr>
<td>Safety Management, Occupational</td>
<td>92</td>
</tr>
<tr>
<td>Sales and Marketing</td>
<td>82</td>
</tr>
<tr>
<td>Scholarships</td>
<td>28</td>
</tr>
<tr>
<td>Simultaneous Enrollment</td>
<td>23</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>155</td>
</tr>
<tr>
<td>Social Sciences Comprehensive</td>
<td>164</td>
</tr>
<tr>
<td>Sociology</td>
<td>167</td>
</tr>
<tr>
<td>Sociology Courses</td>
<td>278</td>
</tr>
<tr>
<td>Soil and Crop Science</td>
<td>68</td>
</tr>
<tr>
<td>Software Engineering</td>
<td>111</td>
</tr>
<tr>
<td>Software Engineering Courses</td>
<td>279</td>
</tr>
<tr>
<td>Spanish</td>
<td>150</td>
</tr>
<tr>
<td>Spanish Courses</td>
<td>281</td>
</tr>
<tr>
<td>Special Education/Inclusion</td>
<td>175</td>
</tr>
<tr>
<td>Special Academic Programs</td>
<td>38</td>
</tr>
<tr>
<td>Special Students</td>
<td>8</td>
</tr>
<tr>
<td>Speech Communication</td>
<td>139</td>
</tr>
<tr>
<td>Speech Courses</td>
<td>282</td>
</tr>
<tr>
<td>Student Affairs</td>
<td>47</td>
</tr>
<tr>
<td>Student Discipline</td>
<td>25</td>
</tr>
<tr>
<td>Student Health Insurance</td>
<td>48</td>
</tr>
<tr>
<td>Student Health Services</td>
<td>48</td>
</tr>
<tr>
<td>Student Organizations</td>
<td>51</td>
</tr>
<tr>
<td>Student Orientation</td>
<td>5</td>
</tr>
<tr>
<td>Student Support Services</td>
<td>51</td>
</tr>
<tr>
<td>Students with Disabilities</td>
<td>51</td>
</tr>
<tr>
<td>Study Abroad Programs</td>
<td>42</td>
</tr>
<tr>
<td>Suspension</td>
<td>24</td>
</tr>
<tr>
<td>Teacher Education Courses</td>
<td>283</td>
</tr>
<tr>
<td>Teaching Majors</td>
<td>172</td>
</tr>
<tr>
<td>Teaching Minors</td>
<td>172</td>
</tr>
<tr>
<td>Technical and Event Services</td>
<td>52</td>
</tr>
<tr>
<td>Technology Education</td>
<td>90</td>
</tr>
<tr>
<td>Test-Outs</td>
<td>17</td>
</tr>
<tr>
<td>Textbook Center</td>
<td>52</td>
</tr>
<tr>
<td>Theater</td>
<td>140</td>
</tr>
<tr>
<td>Theater Courses</td>
<td>288</td>
</tr>
<tr>
<td>Transcripts</td>
<td>23</td>
</tr>
<tr>
<td>Transfer Credit</td>
<td>10</td>
</tr>
<tr>
<td>Transfer Procedures, Undergraduate</td>
<td>10</td>
</tr>
<tr>
<td>Transfer Students</td>
<td>8</td>
</tr>
<tr>
<td>Transfers from Wisconsin Technical College Institutions</td>
<td>11</td>
</tr>
<tr>
<td>Tri-State Initiative (TSI)</td>
<td>12</td>
</tr>
<tr>
<td>Tuition and Fee Policies</td>
<td>19</td>
</tr>
<tr>
<td>Tutoring Services, University</td>
<td>52</td>
</tr>
<tr>
<td>University Seal and Colors</td>
<td>7</td>
</tr>
<tr>
<td>UW Colleges/UW-Platteville Guaranteed Transfer Program</td>
<td>11</td>
</tr>
<tr>
<td>UW Study Courses</td>
<td>289</td>
</tr>
<tr>
<td>Veterans Advanced Credit</td>
<td>17</td>
</tr>
<tr>
<td>Wisconsin Technical College Transfers</td>
<td>11</td>
</tr>
<tr>
<td>Withdrawal from Courses</td>
<td>20</td>
</tr>
<tr>
<td>Withdrawal from the University</td>
<td>25</td>
</tr>
<tr>
<td>Writing Center</td>
<td>52</td>
</tr>
<tr>
<td>Women's Center</td>
<td>52</td>
</tr>
<tr>
<td>Women's Studies</td>
<td>168</td>
</tr>
<tr>
<td>Women's Studies Courses</td>
<td>290</td>
</tr>
<tr>
<td>Writing, Professional</td>
<td>145</td>
</tr>
<tr>
<td>Zoology</td>
<td>77</td>
</tr>
</tbody>
</table>