Program Descriptions

Viewing Options

- Display program descriptions in a single window (best for printing)
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This is an evolving on-line catalog...

- THIS CATALOG INFORMATION WILL BE FULLY UPDATED BY JUNE 1, 2003
- Information on this catalog reflects the most up to date information approved for the Web.
- Program modifications may have occurred that are NOT reflected in this on-line document.
- Course listings are updated regularly.
- Program listings will be reviewed and updated annually.
- Page numbers refer to the 2001-2003 print edition of this catalog.
- It may be necessary to refer to the most current edition of the printed catalog for information not available on this site.
- Please consult with your academic advisor regarding academic requirements.

THE GENERAL EDUCATION PROGRAM

SUMMARY OF COLLEGES, DEPARTMENTS AND MAJORS

ACCOUNTING (ACCT)
AGRICULTURAL ECONOMICS (AGEC)
AGRICULTURAL EDUCATION (AGED)
AGRICULTURAL ENGINEERING TECHNOLOGY (AGEN)
AG STUDIES
AGRONOMY (AGRN)
ANIMAL STUDIES (ANSC)
ANTHROPOLOGY (ANTH)
ART (ART)
BIOLOGY (BIOL)
BIOTECHNOLOGY (BIOT)
BUSINESS ADMINISTRATION
CHEMISTRY (CHEM)
COACHING
COMMUNICATIVE DISORDERS
COMPUTER SYSTEMS (CPTS)
CONSERVATION
CRIMINAL JUSTICE (CJ)
CROPS AND SOILS
DAIRY SCIENCE (DASC)
DANCE EDUCATION (DANC)
EARLY CHILDHOOD CERTIFICATION
ECONOMICS (ECON)
ELEMENTARY EDUCATION (TED)
ENGLISH (ENGL)
ENVIRONMENTAL SCIENCE
ETHNIC STUDIES (ETHN)
FARM MANAGEMENT
FILM STUDIES (FILM)
FOOD SCIENCE AND TECHNOLOGY (FDSC)
GEOGRAPHY (GEOG)
GEOLOGY (GEOL)
HEALTH AND HUMAN PERFORMANCE
HISTORY
HONORS (HON)
HORTICULTURE (HORT)
HYDROGEOLOGY (HORT)
INTERNATIONAL STUDIES (INTS)
JOURNALISM (JOUR)
LAND USE PLANNING
LANGUAGE ARTS READING
MARKETING COMMUNICATIONS (MARC)
MASS COMMUNICATION
MATHEMATICS
MODERN LANGUAGE (MODL)
MUSIC (MUS/MUSE/MUSA)
MUSIC THEATRE
OUTDOOR EDUCATION
PHILOSOPHY(PHIL)
PHYSICS (PHYS)
POLITICAL SCIENCE (POLS)
PROFESSIONAL AND ORGANIZATIONAL COMMUNICATION
PROFESSIONAL WRITING
PSYCHOLOGY (PSYC)
SCIENCE, BROAD FIELD
SCIENCE, GENERAL
SECONDARY EDUCATION
SOCIOLOGY
SOCIAL SCIENCE
SOCIAL STUDIES, BROAD FIELD
SOCIAL WORK (SOWK)
SOIL SCIENCE (SOIL)
SPEECH COMMUNICATION AND THEATRE ARTS (SCTA)
TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES
THEATRE
WOMEN’S STUDIES
The College of Agriculture, Food and Environmental Sciences (CAFES) has provided education in the agricultural sciences since 1912 and has earned an outstanding reputation for high quality education and service to the people of Wisconsin.

Because the local and global issues which concern agriculture, food and the environment are continuously changing, graduates with degrees in any of 16 major academic areas will find many challenging career opportunities. Graduates can expect to find employment in the food and agricultural sciences, biotechnology, production agriculture, agricultural business, environmental sciences, and natural resources. Special areas of emphasis include dairy science, horse science, meat animal science, horticulture, agronomy, agricultural engineering technology, environmental science, food science, conservation, land use planning, marketing communications, and geology. Graduates may also elect to pursue careers in teaching, research, and extension after obtaining advanced degrees.

The college is equipped with excellent classroom facilities and teaching laboratories. Prominent among the latter are food processing plants, a computer aided drafting lab, a plant tissue culture laboratory, and a greenhouse with a computerized environmental control system. Other laboratories support teaching in microbiology, biochemistry, nutrition, soil and water science, geology, resource management, plant science, animal physiology, electronics, structures, farm power, plastics, metals, and machinery.

The college operates two laboratory farms which support beef and dairy cattle, swine, sheep and horses. Both the animal and the associated crop production enterprises provide vital resources for University teaching, extension, and research.

Departments and Majors

AGRICULTURAL ECONOMICS
  Agricultural Business

AGRICULTURAL EDUCATION
  Agricultural Education

AGRICULTURAL ENGINEERING TECHNOLOGY
Agricultural Engineering Technology, Environmental Engineering Technology, and Mechanized Systems Management Options

ANIMAL & FOOD SCIENCE

Animal Science (Meat Animal Science and Equine Science Emphases)

Dairy Science (Management & Science Options)

Food Science & Technology (Industry, Dairy Technology & Science Options)

PLANT & EARTH SCIENCE

Conservation

Crop and Soil Science

Geology (Bachelor of Science Program and Earth Science Teacher Certification Option Secondary Education)

Horticulture (Professional Horticulture Option and Landscape Design and Contracting Option)

Land Use Planning

CAFES INTERDISCIPLINARY MAJORS

Biotechnology

Agricultural Studies

Environmental Science

Marketing Communications

Several majors also provide options and various emphasis areas for increased specialization. Courses in agricultural communications can be taken under the Agricultural Studies Major or in Marketing Communications. Certification in Earth Science for teaching in secondary schools may be obtained by enrolling in the Geology major.

Minors (minimum of 22 credits) are offered in most of the areas identified above and in Environmental Studies, Hydrogeology, Outdoor Education, and Earth Science.

Several related two-year programs provide college-level training leading to a Two-Year Certificate.

Internship Programs
The College of Agriculture, Food and Environmental Sciences is committed to educational programs in which students in any major or minor in the College have the opportunity to blend theory and practice by combining classroom learning with planned and supervised field experiences.

The Internship Program provides a practical dimension to traditional classroom learning and is recommended for most students. The program makes a significant contribution to individual students in their personal, social and career development. The Internship Program is open to those students who have completed at least 30 credits of course work and who have a cumulative GPA of 2.00 or above.

The Internship Program requires the work supervisor and faculty coordinator to develop learning objectives with the student and to evaluate the student’s experience. The final grade is given by the faculty coordinator. Participating students are required to complete an approved special project in collaboration with the firm or agency involved. Students must also submit progress reports on a regular basis.

A total of four credits may be earned during a 10- to 16-week period, or eight credits may be awarded for a 32-week internship experience. A maximum of eight credits may be used to fulfill a part of the graduation requirement.

Students in the Internship Program receive remuneration for their work during the field experience.

Students interested in these programs should contact the Internship Office, College of Agriculture, Food and Environmental Sciences, (715) 425-3368, or contact a faculty internship coordinator in any of the departments.

International Programs Center

The International Programs Center (IPC) in the College of Agriculture, Food and Environmental Sciences coordinates technical assistance and training programs on behalf of the University. A full range of services for international students and trainees is offered by the university. Governments and agencies sponsoring international students who require special academic or administrative services may be required to pay an administrative fee. The current administrative fee policy and schedule is available from IPC, 210 Agricultural Science Building, (715) 425-3535.

Interdepartmental Courses

AGED 140 Orientation to College, 2 cr. hrs.
AGED 260 Professional Careers in Agriculture, 2 cr. hrs.

Courses listed in each college program area:

270 Internships I, 24 cr. hrs.
271 International Internship, 4 cr. hrs.
370 Internships II, 24 cr. hrs.

Bachelor Of Science Degree

Requirements for CAFES Departmental Majors 120 Total Credits
A. General Education 41-43 Credits

1. Communications 9 cr. hrs.
   SCTA 101, 116 or 211 3 cr. hrs.
   ENGL 111, 112 or 115 6 cr. hrs.

2. Humanities and Fine Arts 8-9 cr. hrs.
   Select one: ENGL 241, 242, 243, 244 or 245 3 cr. hrs.
   Select one: ART 100, 211, 212; DANC 100, MUS 100, 200, 234, 235;
   SCTA 105, 337, 338, 339 3 cr. hrs.
   Select one: ENGL 203, 206, 207, 212, 214, 222, 227, 231, 232,
   233, 234, 235, 300, 443;
   MODL: any 1st year/2nd sem. language course,
   any 2nd year language course, or any 3rd year language course;
   PHIL 151, 221, 222, 223, 224, 230, 235, 240, 245, 265; 3 cr. hrs.
   IHUM 498 2 cr. hrs.

   Select one course from 3 of these groups:
   ANTH 100 3 cr. hrs.
   ECON 100 3 cr. hrs.
   GEOG 120 3 cr. hrs.
   HIST 102, 103, 104, 140, 145, 160 3 cr. hrs.
   POLS 114, 260 3 cr. hrs.
   PSYC 101 3 cr. hrs.
   ESM 105 3 cr. hrs.
   SOCI 100 3 cr. hrs.
   ISSC 496 2 cr. hrs.

4. Sciences 10 - 12 cr. hrs.
   CHEM 111 and 116 5 cr. hrs.
   Select two courses from the following:


PHYS 151 or 161 (required for Ag. Eng. and Fd. Sci. majors) 3-4 cr. hrs.

ISCI 497 2 cr. hrs.

5. Mathematics 3 cr. hrs.

MATH 146 or a higher number Algebra/Calculus course 3 cr. hrs.

6. Physical Education 2 cr. hrs.

PE 108 1 cr. hrs.

Two .5 cr. activities courses 1 cr. hrs.

Students must take one but no more than two of the two credit Senior Interdisciplinary Study courses.

A course emphasizing human diversity is also required. See page 18 for a list of current diversity courses.

B. Foundation Courses in Agriculture 12-18 Credits

AGEC 230 3 cr. hrs.

AGEN 150 3 cr. hrs.

AGRN 161 or HORT 161 3 cr. hrs.

ANSC 111 3 cr. hrs.

FDSC 112 3 cr. hrs.

SOIL 210 3 cr. hrs.

C. Major Concentration 59-64 Credits

Required courses and electives as required by the departmental major.

Agricultural Studies Major

This program has been designed for those students who wish to complete a broad array of courses within the agricultural sciences. The Agricultural Studies major enables the student to gain a breadth of knowledge about many areas within the field of agriculture. A relatively large course elective component allows students to be flexible and to create combinations of courses that meet individual needs. For example, students may elect courses in agricultural communications under this major (see page 60 for details).

Two Year Program In Agricultural Sciences
This program is intended for students who wish to enter agriculturally related occupations or production agriculture. Although the program is designed as a twoyear course of study, all of the courses in the program are selected from the fouryear curriculum. Students who later decide to work toward the B.S. degree will receive full credit for courses completed successfully under this program. Students must maintain a 2.00 or above GPA.

Upon application by the student, a certificate will be awarded by the College of Agriculture, Food and Environmental Sciences after successful completion of the twoyear program.

Two-year program requirements 60 Total Credits

A. General Education 25 Credits
ENGL 111, 112 6 cr. hrs.
SCTA 101 3 cr. hrs.
BIOL 100 3 cr. hrs.
CHEM 111, 116 5 cr. hrs.
ESM 105 3 cr. hrs.
MATH 146 3 cr. hrs.
P ED 108 1 cr. hrs.
P E (Select two .5 cr. activities courses) 1 cr. hrs.

B. Courses in Agricultural Science 30-31 Credits
Student must select and complete the requirements for one of the following areas of specialization:

1. Agricultural Business
AGEC 230,305,355 9 cr. hrs.
Select three of the following courses in AGEC: 345, 360, 365, 368, 468 9 cr. hrs.
Ag Sciences electives 12-13 cr. hrs.

2. Agricultural Communications
AGED 110, 202, 230, 260 15 cr. hrs.
JOUR 112 3 cr. hrs.
SCTA 116 3 cr. hrs.
CPTS 105 2 cr. hrs.
ENGL 367 3 cr. hrs.
Ag Sciences electives 4-5

3. Agricultural Engineering Technology
AGEN 150, GENG 121, 235 8 cr. hrs.
Select three: AGEN or GENG
100 or 200 level courses 7 cr. hrs.
Select three: AGEN or GENG 300 or 400 level courses 89
Ag Sciences electives 6-7 cr. hrs.

4. Agronomy
AGRN 161, 260, 263, 266, 345 14 cr. hrs.
SOIL 210, 311 7 cr. hrs.
AGEC 230 3 cr. hrs.
Ag Science electives 6-7 cr. hrs.

5. Dairy Science
ANSC 111, 231, 232, 257, 345 14 cr. hrs.
DASC 120, 306 4 cr. hrs.
Ag Sciences electives 12 cr. hrs.

6. Farm Management
AGEC 230, 305, 360 9 cr. hrs.
Select 2: AGEC 345, 355, 365 6 cr. hrs.
ANSC 231 3 cr. hrs.
AGRN 161 3 cr. hrs.
SOIL 210 3 cr. hrs.
Ag Sciences electives 6-7 cr. hrs.

7. Food Science
FDSC 112, 113, 312, 313, 335 17 cr. hrs.
FDSC electives 6 cr. hrs.
BIOL 324 4 cr. hrs.
Ag Sciences or Business electives 5-6 cr. hrs.
8. Horse Science
Select 1: ANSC 261 or 268 3 cr. hrs.
Agricultural Sciences electives 8-9 cr. hrs.

9. Horticulture
AGRON/HORT 161 3 cr. hrs.
HORT 169, 200, 310, 327 or 347, 352 16 cr. hrs.
BIOL 314, SOIL 210 6 cr. hrs.
Directed electives 5-6 cr. hrs.

10. Meat Animal Science
ANSC 111, 140, 231, 232, 257 15
Select 2: ANSC 365, 366, 367, 368
Agricultural Sciences electives 9

11. Soil Science
SOIL 210, 311, 350, 440 15 cr. hrs.
AGRN 161, 263, 264, 345 12 cr. hrs.
GEOL 101, 102 4 cr. hrs.
Ag Sciences electives 0
C. Free electives 45 cr. hrs.
The liberal arts have played an increasingly important role at the University of Wisconsin-River Falls since the mission of the University was broadened from that of a teachers college half a century ago.

Based on the premise that the liberal arts offer the strongest foundation for society through the development of the intellectual, cultural and social concepts of the student, the College of Arts and Sciences offers many opportunities. The mission of the college is to provide for the education of the complete person, education for citizenship and leadership, education for a productive life, and education for the love of learning. These are the primary values associated with a liberal arts education regardless of the discipline.

The College of Arts and Sciences offers majors within its three divisions, Arts and Humanities, Sciences and Mathematics, and Social Sciences, whose curricula prepare students for professional careers and graduate school.

Though changes will take place in the period that this catalog is in effect, the continuing theme will be that of allegiance to students and their opportunities to learn.

Liberal Arts majors and minors available in the College of Arts and Sciences include: art, biology, biotechnology, chemistry, communicative disorders, computer science (applied computer systems), economics, English, environmental science, geography, history, journalism, marketing communications, mathematics, modern languages (French, German and Spanish), music, physics, political science, psychology, social work, sociology, speech communication, and teaching English as a second language (TESOL). In addition, there are broad area majors in fine arts (Bachelor of Fine Arts), English (for education majors), music, science and social studies. Minors not identified with majors include: anthropology; business communication; GIS and cartography; computer science; criminal justice; mass communication; philosophy; professional writing; theater; and interdisciplinary minors in decision sciences; ethnic studies; international studies; film studies; musical theatre; and women's studies. Additional minors provided for education majors include: language arts, general science, and social science.

Curricula in the Arts and Sciences

The four-year curriculum, leading to the Bachelor of Arts or the Bachelor of Science degree, was authorized by the governing board of the State Universities in 1951. This program is designed to give a broad, liberal education and to be the foundation for further specialization in graduate schools, professional colleges of medicine, law, dentistry, engineering and others, or to prepare the
student to go directly into the civil service, industry and other fields of work.

A total of 120 semester hours is required for graduation. One full year of work (30 credits) must have been done in residence and the last 15 credits for the degree must have been done in residence unless the dean of the college permits an exception. A candidate must have an honor point average of 2.25 in advanced courses (numbered 300 and above) in the major field of specialization and must have an overall honor point average of 2.0 to graduate.

Liberal Arts Degrees

Bachelor of Arts

General Education 39 cr. hrs.

Major 34-36 cr. hrs.

The courses taken to satisfy the Language Competency, International Component and College Requirement may not be counted toward the major. However, they may be counted toward an optional minor, as a minor is not required for the BA degree.

Language Competency (see test-out rules on page 320) 14-17 cr. hrs.

This requirement can be met by satisfying one of the following guidelines:

Two years of one foreign language taught at UW-RF or transferred
Test-out into 100 or 200 level and complete through the 202 course
Test-out into 300 level and complete the 301 course

Modern Languages majors can satisfy this requirement by:
Taking 14 credits in a language other than the language of the major, or
Taking 14 credits of additional coursework selected from the College Requirements and/or the International Component, or
Completing a minor in another field.

International Component 6 cr. hrs.

Select international experience and/or international focus courses.

International experience courses:
INTS 370, 377; HUM 374; ART/ENGL 376; MODL 376, 377

International focus courses:
ART 314, 318; ECON 328, 344; ENGL 441; GEOG 340, 342, 343, 344;
HIST 201, 331, 349, 371; HUM 261; INTS 200; MODL-FREN 342, GERM 342,
SPAN 342, 346; MUS 300; PHIL 245; POLS 245, 346, 347, 348, 349; and all departments 378.
College Requirement 12-14 cr. hrs.

Courses must be outside the department of the major. Courses must be taken from at least three groups but must include Philosophy as one of the groups.

Philosophy - 200 level or higher

History of the arts (art, music, theatre, dance) - 200 level or higher:
ART 211, 212, 311, 312, 314, 318; MUS 234, 235; SCTA 337, 338, 339

Literature (from English or Modern Language departments) - 300 level or higher

History - 200 level or higher

Arts and Ideas-Humanities 255, 256

Supporting Courses/Electives 8-13 cr. hrs.

As needed to achieve 120 credits

Diversity Requirement

A three-credit course which may be double-counted toward any requirement or may be applied toward electives.

TOTAL 120 cr. hrs.

Bachelor of Fine Arts

Requirements for this degree are identified in the Art Department section. See pages 66-68.

Bachelor of Science

General Education 39 cr. hrs.

Major/Minor (Major 34-36/Minor 21-24) 55-60 cr. hrs.

Additional departmental requirements 0-28 cr. hrs.

i.e., supporting courses outside the major/minor departments

(in interpreting these requirements, mathematics and computer science will be considered as different departments).

Requirements vary according to program.

Liberal Arts 10 cr. hrs.

See liberal arts courses listing below.

Courses must be at the 200 level or above with the exception of Modern
Language courses; testout credits are excluded.

All courses taken to meet the Liberal Arts requirements must be outside the division of the major and outside the department of the minor; there must be at least three credits in each of two divisions but no more than six credits in any one division. The divisions are:

1. Humanities/Fine Arts
2. Modern Languages
3. Sciences/Mathematics
4. Social Sciences.

Electives 3-22 cr. hrs.

As needed to achieve a total of 120 credits. A maximum of 12 credits may be taken in the department of the major; all other credits must be outside the department of the major.

Diversity Requirement

A three-credit course which may be double-counted toward any requirement or may be applied toward electives.

TOTAL 120 cr. hrs.

Liberal Arts Courses

These courses meet the Liberal Arts requirements prescribed in the preceding degree programs. They are taken from this catalog only. For courses listed in previous catalogs or those approved subsequent to this catalog, check with the Dean, College of Arts and Sciences.

Humanities Division


Modern Language Division

All Modern Language courses except: FREN 350, GERM 350, SPAN 350; COMD 469.

Natural Sciences and Mathematics Division

Science - 497.

*may not count both Geography 316 and Geology 269.

Students may substitute advanced courses in sciences and mathematics within the distribution requirement by petition of the department and with approval of the Dean, College of Arts and Sciences.

Social and Behavioral Sciences Division


General Education Plan

A. Communication 9 cr. hrs.

1. Speech 3 cr. hrs.

Select from: SCTA 101, 116 or 211

Students may satisfy the requirement by demonstrated proficiency in speech.

2. Composition 6 cr. hrs.

ENGL 111, 112

Students who show acceptable proficiency in writing may take a three-credit accelerated course in composition (ENGL 115) in lieu of these six credits.

B. Humanities and Fine Arts 8-9 cr. hrs.

Humanities 255 Arts and Ideas I and Humanities 256 Arts and Ideas II may be substituted for any courses in the Humanities and Fine Arts area.

1. Literature 3 cr. hrs.

Select from: ENGL 241, 242, 243, 244, 245-only one of the 240 series

literature courses may be counted toward graduation.
2. Fine Arts 3 cr. hrs.

Select from: ART 100, 211, 212; MUS 100, 200, 234, 235; DANC 100;
SCTA 105, 337, 338, 339

3. Other 2-3 cr. hrs.

Select from: ENGL 203, 206, 207, 212, 214, 222, 231, 232, 233, 234, 235, 300, 443; HIST 101, 201, (if chosen for B, may not be counted in C);
MODL 102, 201, 202, 301; PHIL 151, 221, 222, 223, 224, 230, 235, 240, 245, 265;
POLS 230 (if chosen for B, may not be counted in C); Interdisciplinary Capstone/
Hum.-Fine Arts 498 - 2 cr.

Option - Credits for the capstone course are applied (double counted) here
from E below; the course is taken instead of a course in the "other"
group of Division B.

C. Social and Behavioral Sciences 8-9 cr. hrs.

Students must take one course in any three of the following areas:
ANTH 100
ECON 100
GEOG 120 (if chosen for C, GEOG 110 may not be counted in D)
HIST 102, 103, 104, 145, 160 (if chosen for C, may not be counted in B)
POLS 114, 260 (if chosen for C, may not be counted in B)
PSYCH 101
ESM 105
SOCL 100, SOWK 150

Interdisciplinary Capstone/Soc. Sci. 496 - 2 cr.

Option - Credits for the capstone course are applied here (double counted)
from E below; the course is taken instead of a third course in Division C.

D. Sciences 8-9 cr. hrs.

Students must take courses from three basic sciences or two basic sciences
and Science 497. At least one course must have a significant laboratory component.

Courses which include a required laboratory are listed under the heading LAB INCLUDED. Courses for which there is an optional laboratory course are listed under the heading LAB NOT INCLUDED, BUT OPTIONAL. Courses which have no laboratory are listed under the heading NO LAB.

LAB INCLUDED

BIOL 100 or 150
CHEM 100
CHEM 101
PHYS 114

LAB NOT INCLUDED, BUT OPTIONAL

Without the optional lab, these courses count as NO LAB General Education science courses.

CHEM 111 (optional lab: CHEM 116)
GEOG 110 (optional lab: GEOG 111) (if chosen for D, GEOG 120 may not be counted in C)
GEOL 101 (optional lab: GEOL 102)
PHYS 151 (optional lab: PHYS 156)
PHYS 161 (optional lab: PHYS 101)

NO LAB

PHYS 117, Interdisciplinary Capstone - Science 497 - 2 cr.

Option - Credits for the capstone course are applied here (double counted)

from E below; the course is taken instead of a third course in Division D.

E. Senior Level Interdisciplinary Capstone Course 2-4 cr. hrs.

At least one course of two credits is required and must be counted toward General Education, but students may elect to take a second course. Credits for both courses will apply (be double counted) to fulfill the 8-9 credit requirement in the appropriate areas B, C, or D above. The second course may be applied instead to the appropriate liberal arts group but may not be counted toward both General Education and Liberal Arts requirements. In Area B, the credits must be applied to the "other" category.

F. Mathematics 3 cr. hrs.

Students may satisfy this requirement in one of the following ways:
a. Demonstrated proficiency by high school course work, designated ACT score, and designated score on the UW-System Math department test. (In this case, no credit will be awarded. A student will be free of this requirement.) See pages 317-318 for proficiency standards testing requirements.

b. MATH 126 or a higher numbered Math course (except MATH 246 or 247)
or PSYCH 201 or ECON 205.

G. Physical Education 2 cr. hrs.

P ED 108

Lifetime activity courses (choose two courses)

TOTAL 39 cr. hrs.

Assumes completion of 8 credits in each of two areas from B, C and D and 9 credits in the third along with completion of the other requirements. If the English and mathematics requirements are satisfied by demonstrated proficiency, the total number of credits is reduced accordingly.

In meeting the objectives of the General Education program at UW-RF, a student shall take a writing-intensive course to be specified by the major department. This policy does not replace a requirement for general education courses to contain writing components. This objective can be fulfilled by a course within major or another area with a substantial writing component.

Options in the Liberal Arts Degrees

To provide flexibility for programs in the Bachelor of Science degree, students are provided the following options:

Option A - Standard Option

A departmental major (usually 34-36 hours) and a departmental minor (usually 21-24 hours) or a broad field major (usually 56-60 hours).

Option B - Individualized Interdisciplinary Option

A special program of studies intelligently arranged around the particular academic and professional needs of the student. It generally consists of the core of a major along with an interdepartmental grouping of courses in a minor reflecting a career/learning focus for a minimum total of 60 credit hours. Designed in consultation with the student's advisor before beginning the junior year, it must be submitted to and approved by the Dean of the College of Arts and Sciences at that time. The proposed program is accompanied by a letter from the student justifying the purposes of the program in relation to the student's needs and a letter of validation from the advisor.

Option C - Professional Option

A broad program of studies basic to later professional work. A student transferring at the
Conclusion of the junior year to a professional school may have a part of the work in the professional school applied toward the senior year for the bachelor's degree. Details must be worked out by the student and the advisor and approved by the Dean of the College of Arts and Sciences before the junior year. A Dual Degree-Physics, Chemistry and Engineering is available (see page 15 and 150).

Internships in the College of Arts And Sciences

The Internship Program offers the student a number of opportunities for earning credit in work and training off campus and on campus. This internship is open to those students who have completed at least 60 credits of course work. Internships may be arranged for up to 12 undergraduate credits in the student's major or minor field, depending upon departmental allowances. Credits may be earned all in one semester or summer, but in no more than two academic terms, two credits being the minimum for any one internship; some departments have a higher credit minimum. The internship courses are numbered 379.

A sophomore level internship course, numbered 279, is also offered by many departments. These internships are identified as "introductory professional work experiences."

The fee schedule for the interning student will be the same as the fee schedule for an on-campus student. Each department, with the approval of the Dean of the College, will decide the appropriate number of hours for each internship, according to the level of the work experience in relation to upper division courses, the extent of work involved and the relationship of the work to professional academic pursuits. Individual departments will determine if internship programs can substitute for required courses in the major or minor field. A minimum number of 45 work experience hours per week for the semester is required for 12 credits.

Internship proposals may be initiated by the student, the major or minor department or off-campus agencies. Planning with the academic advisor for an internship should precede the semester in which the proposal is submitted. Some applications for an internship should be submitted to the department chair for approval while other applications should be submitted to the Dean of the College for approval at least six weeks prior to the intended start of the internship, after its first having been processed and approved by the faculty advisor and department chairperson. Students must register for the internship credits during the semester the internship is conducted in order to receive credit.

The work supervisor and faculty advisor will evaluate the student's experience. The department will require additional evaluation, the methods to be worked out between the student and his/her faculty advisor within the guidelines of the college. A summary written by the student is submitted to the dean along with the two evaluations prior to the submission of a grade.

Independent Study and Directed Readings

In accordance with University policy, the College of Arts and Sciences offers independent study through most departments. Additionally, most departments offer courses in directed readings. Independent Study (numbered 499) is defined as an individually designed topic or course of study or unstructured research to meet the needs of a student. Directed Readings (numbered 490) is a course that is generally prescribed as to its content, materials and activities; it may be used to instruct students in the materials of a given course when that course is taken out of sequence or individually, but under the direction of an instructor.

Students will be limited to nine credit hours of independent study course work and nine credit
hours of directed readings but with a combined maximum of 12 credit hours within the 120 credit degree program. Individual departmental courses of study may allow fewer such credits than this maximum for their majors or minors. From one to three credits may be taken in each of these courses in a given semester, depending upon departmental requirements and availability.

Students should plan for such courses with their major advisor. Application for independent study or directed readings must be processed through the department chairperson for approval of the course proposal and assignment of a faculty advisor.

Interdepartmental Offerings

Interdepartmental courses are typically identified by and listed in the departments which offer them, such as, BIOL/CHEM 343 - Microtechniques and Electron Microscopy or ENGL/GEOG/HIST 385 - Interdisciplinary Seminar on the American Frontier. Listed below are interdepartmental majors, minors and programs.

Bio-Medical Research

Students interested in careers in bio-medical research are advised to take a broad area science major, choosing options within the major to become as broadly and professionally prepared as possible. A suggested program sheet is available in the Biology Department.

Biotechnology Major, see pages 70-71.

Environmental Science Major, see pages 104-105.

Ethnic Studies Minor, see page 106.

Film Studies Minor, see page 108.

Humanities

Humanities courses focus on art, music and literature as representative of the ideas and cultural values of a historical period. These interdisciplinary courses integrate the study of the arts, emphasizing correlations among them. Frequently, field trips to museums, concerts and theaters are included. See the course listing for Humanities.

International Studies Minor, see pages 126-128.

International Study Abroad Programs, see page 22.

Marketing Communications Major, see pages 133-134.

Musical Theatre Minor, see page 146.

Professional Writing Minor, see pages 155-156.

Religion, The Academic Study of

The rulings of the Attorney General of the state of Wisconsin have made it clear that the academic study of religions is not only appropriate but also germane to the tasks of a university, provided only that the study proceeds from concerns which neither advance nor oppose the sectarian practice of religion, but rather attempt to understand religion within the context of the secular world. Within the established departments of this university there are numerous courses offered
which fit two classifications:

1) those courses whose main intent or one of whose main intentions is oriented to the study of religion;

2) those courses whose orientation is not specifically directed towards the study of religion, but which have a content that can be broadly interpreted as related. We list here both types of courses for whatever informational benefit such a listing can have for the student with such an interest.

**TYPE I "Oriented"**

HIST 321 The Middle Ages
HIST 323 The Reformation
PHIL 232 Biblical and Philosophical Approaches to Contemporary Problems
PHIL 245 Islam and Oriental Religions in the USA
PHIL 265 God, Religion, Science and the Meaning of Life
SOCI 227 Religious Groups and Cults

**TYPE II "Related"**

ART 211 Art History to 1500
ART 212 Art History Since 1500
ENGL 237 Introduction to Greek Mythology
ENGL 421 Chaucer
ENGL 423 17th Century Prose and Poetry to the Restoration
HIST 101 Origins of Western Civilization
HIST 322 The Renaissance
HIST 324 Absolutism, Enlightenment and Revolution
HIST/PHIL 415 Philosophy of History
HUM 255 Arts and Ideas I
HUM 256 Arts and Ideas II
PHIL 221 Ancient Philosophy
PHIL 222 Hellenistic and Medieval Philosophy
PHIL 223 Early Modern Philosophy
PHIL 224 Late Modern Philosophy
Science

Broad Field Science Major (Liberal Arts)

Broad Field Science Major (Education)

Broad Field Science Major (Physical Science)

Minor in General Science (Education)

These broad field science majors and minor are programs of study comprised of the science disciplines: biology, chemistry, geology and physics. For information about these majors and their application toward certification see the program listing for Science, Broad Field.

Social Science Minor (Education), see page 162.

Social Studies, Broad Field Major, see page 163.

Women's Studies Minor, see page 176.
Pre-professional Curricula Leading To A Degree

Three-year programs leading to a degree have been designed under Option C for the B.S. degree in the College of Arts and Sciences. See page 36.

These programs leading to a degree are available in such fields as engineering, law, medicine, optometry, and pre-veterinary medicine. Details must be worked out by the student and the advisor and approved by the Dean of the College of Arts and Sciences in advance.

The following programs are designed for students who will transfer to professional schools and colleges. These are suggested curricula only. Since the pre-professional requirements vary, students and their advisors must study the catalog of the institution to which they wish to transfer and make the necessary course adjustments in the suggested programs. By careful selection of pre-professional and general education courses, a three-year student may be able to take advantage of Option C for a bachelor's degree in the College of Arts and Sciences. If Option C is chosen, the program must include completion of General Education requirements.

Please note that many professional schools and colleges are now requiring a bachelor's degree for admission and are becoming graduate schools only.

The names of the advisors for the various pre-professional programs may be obtained by contacting the Office of the Dean of Arts and Sciences, 136 Fine Arts, (715) 425-3366.

Pre-Engineering
General Program (see advisor for specialties)

The first two years of any engineering curriculum are mainly math and physics. In addition, UW-River Falls offers several special courses for engineering. Thus a student will have no problem transferring to an engineering school as a junior after taking the first two years at River Falls.

It should be emphasized, however, that there are slightly different requirements for different engineering specialties and schools so a student should contact the pre-engineering advisor in the Physics Department as soon as possible.

A. General Education 15 cr. hrs.
ENGL 111, 112 6 cr. hrs.
ECON 201, 202 6 cr. hrs.
SCTA 101 3 cr. hrs.

B. Math, Physics and Chemistry 40 cr. hrs.
MATH 166, 167, 256, 266, 331 17 cr. hrs.
PHYS 211 3 cr. hrs.
PHYS 101, 102, 161, 162 10 cr. hrs.
CHEM 111, 112, 116, 117 10 cr. hrs.

C. Technical electives 6-10 cr. hrs.
(Choices depend upon final major)
PHYS 250, 252, 254, 264, 361, 362
MATH/CPTS 326, 346
CHEM 231, 232, 246, 247
BIOL 150
GENG 121, 265
GEOL 101, 102
TOTAL 65-69 cr. hrs.

Dual Degree in Physics, Chemistry and Engineering

The Dual Degree is a special three-year program at UW-River Falls which, upon successful completion, guarantees entry into the Engineering programs at the University of Minnesota or the University of Wisconsin-Madison to complete the rest of the program in approximately two years. At the end of the entire program, students are awarded an engineering bachelor's degree from the Engineering school and a B.S. from UW-River Falls. These programs are administered by the Physics and Chemistry Departments.

A. General Education 39 cr. hrs.

ENGL 111, 112
SCTA 101
ENGL 241-245
Fine Arts 3 cr. hrs.
Diversity 3 cr. hrs. ECON 201
ISSC 496
CHEM 111, 116
PHYS 161, 101
MATH 166
P ED 108

B. Math, Physics and Chemistry 26 cr. hrs.

MATH 167, 256, 266, 331
PHYS 102, 162, 211
CHEM 112, 117
C. Directed electives 22-25 cr. hrs.

D. Engineering Courses transferred back to UW-RF 30 cr. hrs.

TOTAL 117-120 cr. hrs.

Pre-Law

According to the Association of American Law Schools, preparation for entry into law school calls for 1) the development of basic skills, particularly in the use of language; 2) a strenuous effort to improve one's capacity for critical thinking; and 3) the acquiring of a broad liberal arts background. The skill most basic to success both as an undergraduate student and as a law school student is the ability to competently use the English language in both written and oral form. In addition the student needs to be concerned with developing the capacity to think logically and to critically evaluate the knowledge gained through their courses of study. A pre-law program is relatively flexible and does not call for a particular major field or specific list of courses beyond those required by the University for the undergraduate degree. Students with law in mind should think of their pre-law studies as preparation toward a goal rather than a prescribed set of courses.

The pre-law advisor's office (Political Science Department) is available to all students on the UW-River Falls campus who have questions regarding law school. The advisor works closely with those who do choose to apply to law school, to make sure that all the necessary materials are readily available to them and that they understand the application process.

Pre-Medical

It is recommended that students planning to enter medical school complete requirements with a major in either biology or chemistry. Virtually every candidate accepted to medical school holds the baccalaureate degree. A pre-medical advisor should be consulted for requirements for specific medical schools. Although the minimal requirements may be fewer than listed, the following are the required and the highly recommended courses:

A. General Education 9 cr. hrs.

ENGL 111, 112 6 cr. hrs.
SCTA 101 3 cr. hrs.

B. Science and Math 77 cr. hrs.

MATH 146, 147, 166 10 cr. hrs.
PHYS 151, 152, 156, 157 10 cr. hrs.
BIOL 150, 230, 240, 340 12 cr. hrs.

C. Behavioral Sciences 3 cr. hrs.

PSYC 101 3

TOTAL 89 cr. hrs.
D. Electives

Recommended elected courses are: BIOL 235, 324, 353 and 464; HEAL 263 and 364. Add to these a variable number of credits selected to meet requirements of specific medical schools (for example, the University of Minnesota requires two semesters of English literature) and/or to fulfill academic major and minor requirements for a degree.

Pre-Optometry

Most professional schools of optometry require up to 90 credits in a pre-professional program prior to admission. A few schools require or recommend a bachelors degree before admission. Virtually all schools require the applicant to sit for the Optometry College Admission Test (OCAT). Not all schools will require the following courses or some schools may require other courses that are not listed; check closely with advisor.

BIOL 150, 230, 324, 340 14 cr. hrs.
PHYS 151, 152, 156, 157 10 cr. hrs.
MATH 146, 147, 166, 167 14 cr. hrs.
ENGL 111, 112 6 cr. hrs.
PSYC 101 + directed electives 8 cr. hrs.
HIST 3 cr. hrs.
SOCI 100 3 cr. hrs.
Human Anatomy and Anatomy/Physiology 6 cr. hrs.
Introduction to Business 3 cr. hrs.
Basic Accounting 3 cr. hrs.
Directed Electives 2+ cr. hrs

Pre-Pharmacy

A. General Education 9 cr. hrs.
ENGL 111, 112 6 cr. hrs.
SCTA 101 3 cr. hrs.

B. Science and Math 42 cr. hrs.
BIOL 150 3 cr. hrs.
BIOL 230 or 235, 324 3-6 cr. hrs.
CHEM 111, 112, 116, 117 10 cr. hrs.
CHEM 231, 232, 236, 237 8 cr. hrs.
MATH 166, 167 8 cr. hrs.
(Students may need to take MATH 146, 147 (or 149) before taking MATH 166,167)
PHYS 151, 152, 156, 157 10 cr. hrs.
C. Social Science 9 cr. hrs.
ECON 201 3 cr. hrs.
SOCl 100 3 cr. hrs.
PSYC 101 3 cr. hrs.
D. Directed electives 3 cr. hrs.
Depending upon the choice of a pharmacy school, selected courses in the humanities are recommended.
TOTAL 63-66 cr. hrs.

Pre-Veterinary Medicine

The program shown exceeds the minimum requirements for admission to some veterinary colleges, including UW Madison and the University of Minnesota. Based on the experiences of its many successful pre-veterinary students, the University recommends that students complete the full program in order to be better prepared for veterinary school.

A. General Education 15 cr. hrs.
ENGL 111, 112 6 cr. hrs.
SCTA 101 3 cr. hrs.
Electives selected from art, literature, music and theatre 6 cr. hrs.
B. Science and Math 63-69 cr. hrs.
MATH 146, 147 4-10 cr. hrs.
MATH 216 Elementary Statistical Concepts or ANSC 341 Biometrics 3 cr. hrs.
BIOL 150, 230, 240, 324, 350 (ANSC 257 will substitute for BIOL 350) 16 cr. hrs.
PHYS 151, 152, 156, 157 10 cr. hrs.
ANSC 111, 231, 345 6 cr. hrs.
C. Social and Behavioral Sciences 6 cr. hrs.
Select from Anthropology, Economics, Environmental Studies, Geography, History, Political Science,
Psychology, or Sociology

D. Electives

Variable number of credits selected to meet requirements of specific veterinary colleges and/or to fulfill academic major and minor requirements for a degree.

TOTAL 84-90 cr. hrs.

See page 19 for a list of courses that fulfill the diversity requirement.
The College of Business and Economics consists of programs in accounting, computer systems, economics, finance, management, marketing, marketing communications, and management information systems. The College allows students to combine a high quality professional program in business with a solid liberal arts foundation.

The vision of the College of Business and Economics is to be a regional leader in the acquisition, application, and transfer of business and economic knowledge.

The faculty of the CBE are professionals dedicated to being quality teachers, accessible to students; furthering knowledge through scholarships, and serving as valuable resources to the University and community.

In Business and Economics, the University of Wisconsin-River Falls offers the Bachelor of Science degree. Majors and options offered within the various departments of the College of Business and Economics include:

- Accounting
- Business Administration
- Broad Area Business Administration
  - Marketing Option
  - Finance Option
  - Management Option
- Computer Systems
  - Information Systems
  - Management Information Systems
- Economics
- Marketing Communications

Minors offered include:
- Business Administration
- Economics
- Computer Systems
  - Information Systems
  - Management Information Systems
Internships

Internships are an important part of the programs in the College of Business and Economics. They provide an important opportunity for students to blend their academic experience with a supervised work experience. Internships can be taken for 3 credits in the major; internships cannot be included in a minor. Students work with the College's internship offices to build a work experience that best meets the academic needs and interests of the student. Almost all internships are paid a competitive wage. A site supervisor is assigned by the employer. Interns regularly report on their activities to the College's internship supervisors.

Degree Requirements

To obtain a degree in the College of Business and Economics students must acquire a minimum of 120 semester hours. In order to complete a degree in four years, students need to take approximately 15 appropriate credits per semester. Students are encouraged to use advanced placement credits and transfer credits to provide flexibility in their programs and to expand their educational backgrounds. The Admissions Office, the College of Business and Economics student advisor, and faculty advisors will assist students to maximize their educational opportunities in an efficient manner.

General Education Requirements

The College of Business and Economics degree consists of the following components:

A. Communication 9 cr. hrs.
   1. Speech 3 cr. hrs.
      Select from: SCTA 101, 116 or 211
      Students may satisfy the requirement by demonstrated proficiency in speech.
   2. Composition 6 cr. hrs.
      ENGL 111, 112
      Students who show acceptable proficiency in writing may take a three-credit accelerated course in composition (ENGL 115) in lieu of these six credits.

B. Humanities and Fine Arts 8-9 cr. hrs.
   Humanities 255 Arts and Ideas I and Humanities 256 Arts and Ideas II may be substituted for any courses in the Humanities and Fine Arts area.
   1. Literature 3 cr. hrs.
      Select from: ENGL 241, 242, 243, 244, 245-only one of the 240 series literature courses may be counted toward graduation.
2. Fine Arts 3 cr. hrs.

Select from: ART 100, 211, 212; MUS 100, 200, 234, 235; DANC 100;
SCTA 105, 337, 338, 339

3. Other 2-3 cr. hrs.

Select from: ENGL 203, 206, 207, 212, 214, 222, 231, 232, 233, 234, 235, 300, 443; HIST101, 201, (if chosen for B, may not be counted in C);
MODL 102, 201, 202, 301; PHIL 151, 221, 222, 223, 224, 230, 235, 240, 245, 265;
POLS 230 (if chosen for B, may not be counted in C); Interdisciplinary Capstone/
Hum.-Fine Arts 498 - 2 cr.

Option - Credits for the capstone course are applied (double counted) here from E below; the course is taken instead of a course in the "other" group of Division B.

C. Social and Behavioral Sciences 8-9 cr. hrs.

Students must take one course in any three of the following areas:
ANTH 100
ECON 100
GEOG 120 (if chosen for C, GEOG 110 may not be counted in D)
HIST 102, 103, 104, 145, 160 (if chosen for C, may not be counted in B)
POLS 114, 260 (if chosen for C, may not be counted in B)
PSYCH 101
ESM 105
SOCI 100, SOWK 150

Interdisciplinary Capstone/Soc. Sci. 496 - 2 cr.

Option - Credits for the capstone course are applied here (double counted) from E below; the course is taken instead of a third course in Division C.

D. Sciences 8-9 cr. hrs.

Students must take courses from three basic sciences or two basic sciences and Science 497. At least one course must have a significant laboratory component.

Courses which include a required laboratory are listed under the heading LAB INCLUDED. Courses for which there is an optional laboratory course are listed
under the heading LAB NOT INCLUDED, BUT OPTIONAL. Courses which have no laboratory are listed under the heading NO LAB.

LAB INCLUDED

BIOL 100 or 150

CHEM 100

CHEM 101

PHYS 114

LAB NOT INCLUDED, BUT OPTIONAL Without the optional lab, these courses count as NO LAB

General Education science courses.

CHEM 111 (optional lab: CHEM 116)

GEOG 110 (optional lab: GEOG 111) (if chosen for D, GEOG 120 may not be counted in C)

GEOL 101 (optional lab: GEOL 102)

PHYS 151 (optional lab: PHYS 156)

PHYS 161 (optional lab: PHYS 101)

NO LAB

PHYS 117, Interdisciplinary Capstone - Science 497 - 2 cr.

Option - Credits for the capstone course are applied here (double counted)

from E below; the course is taken instead of a third course in Division D.

E. Senior Level Interdiscip. Capstone Course 2-4 cr. hrs.

At lease one course of two credits is required and must be counted toward General Education, but students may elect to take a second course. Credits for both courses will apply (be double counted) to fulfill the 8-9 credit requirement in the appropriate areas B, C, or D above. The second course may be applied instead to the appropriate liberal arts group but may not be counted toward both General Education and Liberal Arts requirements. In Area B, the credits must be applied to the "other" category.

F. Mathematics 3 cr. hrs.

Students may satisfy this requirement in one of the following ways:

a. Demonstrated proficiency by high school course work, designated ACT score, and designated score on the UW-System Math department test. (In this case, no credit will be awarded. A student will be free of this requirement.) See page 317-318 for proficiency
standards testing requirements.

b. MATH 126 or a higher numbered Math course (except MATH 246 or 247) or PSYCH 201 or ECON 205.

G. Physical Education 2 cr. hrs.

P ED 108

Lifetime activity courses (choose two courses)

TOTAL 39 cr. hrs.

Assumes completion of 8 credits in each of two areas from B, C and D and 9 credits in the third along with completion of the other requirements. If the English and mathematics requirements are satisfied by demonstrated proficiency, the total number of credits is reduced accordingly.

In meeting the objectives of the General Education program at UW-RF, a student shall take a writing-intensive course to be specified by the major department. This policy does not replace a requirement for general education courses to contain writing components. This objective can be fulfilled by a course within major or another area with a substantial writing component.

Major

All students earning a major within the College of Business and Economics must complete at least half of their 120 credits required for graduation outside the college. In addition, they must complete at least 50 percent of the business credits in the College of Business and Economics at UW-River Falls.

Students majoring in Economics have the choice of graduating from the College of Business and Economics or from the College of Arts and Sciences. Students who graduate from the College of Arts and Sciences must meet that college's requirements.

Students majoring in Computer Systems (Information Systems) have the choice of graduating from the College of Business and Economics or from the College of Arts and Sciences. Students who graduate from the College of Arts and Sciences must meet that College's requirements.

Computer Systems (Management Information Systems) majors graduate only from the College of Business and Economics.

Minor

In addition to the standard minors listed, College of Business and Economics students can design their own minors to meet their individual educational and career goals. This must be done through the advising process and an approved plan is required before initiating the minor. Students with a major in MIS, CIS or MarComm in the College of Business and Economics must have a minor or double major in Business Administration.

Diversity Course

All students are required to take a diversity course. This course can be double counted in various ways. See page 19 for the list of diversity courses.
Electives

Electives as required to reach a minimum total of 120 credits.

**Language Recommendation**: Students entering with foreign language skills are encouraged to test into the 200/300 level language classes and continue to maintain their language skills.

The curriculum for each major, option, and minor is included under the listing for that major, option, or minor.
College of Education and Professional Studies  
Wyman Education Building  
715/425-3774; FAX 715/425-0622  

Karen J. Viechnicki, Dean  
Mary Manke, Associate Dean  

Departments within the College of Education and Professional Studies include: Health and Human Performance, Teacher Education, Counseling and School Psychology, Communicative Disorders, and the Social Work program.  

Teacher education has been a major commitment of the University of Wisconsin-River Falls since its founding in 1874. The university's teacher education programs have received national recognition for excellence and are accredited by the National Council for the Accreditation of Teacher Education, North Central Association and the Wisconsin Department of Public Instruction.  

The Bachelor of Science degree is granted after successful completion of programs in elementary education and middle/secondary education. Graduate programs leading to the master's degree are also offered in elementary education, counseling, school psychology, reading, agricultural education and middle/secondary education.  

Teacher education students are required to complete a comprehensive program of study in general education, a rigorous series of field-based professional education courses and experiences, and extensive academic study in the areas of certification. Professional education course work and experiences are field-based, requiring numerous laboratory and school-site experiences that apply classroom content. Professional organizations within the college offer students opportunities to become actively involved in the education profession.  

A teaching license in communicative disorders requires a master's degree. Wisconsin and Minnesota require a terminal degree for licensure as a speech pathologist. For more information on the Master's Degree in Communicative Disorders please contact the Graduate School or the Communicative Disorders Department.  

General Education Requirements 51 Total Credits  

1. Communications 9 cr. hrs.  
a. Speech Communication (choose from the following): 3 cr. hrs.  
SCTA 101 Fundamentals of Oral Communication  
SCTA 116 Business and Professional Communication  
SCTA 211 Public Speaking  
b. English Composition: 6 cr. hrs.  
ENGL 111 Freshman English I  
ENGL 112 Freshman English II
Students who show acceptable proficiency in writing may take a three-credit accelerated course in composition (ENGL 115) in lieu of these six credits.

2. Humanities and Fine Arts: 9-12 cr. hrs.
   a. Choose one English literature course from: 3 cr. hrs.
      ENGL 241 Human Issues in Literature
      ENGL 242 The Heroic Figure in Literature
      ENGL 243 Types of Literature
      ENGL 244 The Modern Tradition in Literature
      ENGL 245 Western World Literature
   b. Fine Arts 3
      Elementary Education choose from:
      ART 100 Introduction to Art
      MUS 100 Understanding Music
      Secondary Education choose from:
      ART 100 Introduction to Art
      ART 211 Ancient, Classical and Medieval Art
      ART 212 Renaissance to Modern Art
      DANC 100 History/Appreciation of Dance
      MUS 100 Understanding Music
      MUS 200 American Music
      MUS 235 Music History and Literature I
      MUS 300 World Music
      SCTA 105 Introduction to Theatre and Drama
      SCTA 337 History of Theatre and Dramatic Literature: Ancient Traditions through Renaissance Drama
      SCTA 338 History of Theatre and Dramatic Literature: 18th Century to the Present
      SCTA 339 American Theatre
   c. Choose one Non-Western History/Culture course from the following: 3 cr. hrs.
HIST 201 Introduction to Asian Civilization
HIST 206 Native Americans and the United States
HIST 207 African American History
PHIL 245 Oriental and Islamic Religions in the U.S.
GEOG 120 Human Geography

POLS 114 American National, State and Local Government 3 cr. hrs.
PSYC 101 General Psychology 3 cr. hrs.
TED 252 Foundations of Multicultural Education 3 cr. hrs.

   **Elementary Education** (choose two): 6 cr. hrs.
   CHEM 101 Elementary Principles of Chemistry
   BIOL 100 Introduction to Biology
   GEOL 101 Introductory Geology
   PHYS 114 Basic Physics
   PHYS 117 Introductory Astronomy
   **Elementary Education Environmental Education** (choose one): 3 cr. hrs.
   GEOG 300 Environmental Education
   ESM 300 Environmental Education

   **Secondary Education**: (requirements vary by major) 9 cr. hrs.
   Choose one of the following: 3 cr. hrs.
   BIOL 100 Introduction to Biology
   GEOG 300 Environmental Education
   ESM 300 Environmental Education
   Choose one of the following: 3-4 cr. hrs.
   PHYS 114 Basic Physics
   PHYS 151 General Physics
   PHYS 161 General Physics
PHYS 117 Introductory Astronomy
Choose one of the following: 3 cr. hrs.
CHEM 100 Modern Alchemy
CHEM 101 Elementary Principles of Chemistry
CHEM 111 General Chemistry I
GEOL 101 Introductory Geology
GEOG 110 Physical Environment: Patterns and Systems
5. Senior Capstone Course: 2 cr. hrs.
Choose one of the following three:
ISSC 496 Social Science
ISCI 497 Science
IHUM 498 Humanities
6. Mathematics: 3-8 cr. hrs.
Elementary Education:
MATH 246 Math for Elementary Teachers I 4 cr. hrs.
MATH 247 Math for Elementary Teachers II 4 cr. hrs.
Secondary Education:
MATH 126, higher level math, or testout 3 cr. hrs.
7. Physical Education: 2-3 cr. hrs.
P ED 108 Health and Fitness for Life 1
Two Lifetime Activities courses 1-2 cr. hrs.
Additional Requirements
Note: At this time, please refer to the print edition of 2001 - 2003 Undergraduate Catalog for further information.
Early Childhood, see page 94.
Professional Education Elementary Education, see page 97.
Professional Education Secondary Education, see page 161.
Middle School Certification, see page 139.
Admission to Teacher Education

Application for admission to teacher education is made through the Dean of the College of Education and Professional Studies. Students should initiate the admission to teacher education process upon the completion of 40 semester credits of course work. Students in the Middle/Secondary Education program must be admitted to teacher education before they are permitted to enroll in the following methods courses: TED420, 423 and the appropriate methods course(s) in the major(s) and/or minor(s) TED 429-441. For students in the elementary education program, admission to teacher education is a prerequisite for enrollment in the following Block I courses: TED 310, 311, 312. Students majoring in agricultural education apply for admission to teacher education through the department of agricultural education.

Admission to teacher education is based on requirements of the Wisconsin Department of Public Instruction and the College of Education and Professional Studies. Current information is available in the student handbooks and list of dates at the college website: www.uwrf.edu/college-of-education/. Students are responsible for checking the website for the information they will need.

Appeal Procedures for Admission to Teacher Education

A student may be denied admission to teacher education program on the basis of either a low grade point average (GPA) or inadequate scores on any one subsection of the Pre-Professional Skills Test (PPST/PRAXIS I) or the Computer-Based Academic Skills Assessments (CBT). In addition, a student may be denied admission to the teacher education program based on faculty assessment of the applicant's capacity to carry out requisite responsibilities of beginning teachers and to successfully complete the requirements of a professional teacher education program.

A student who is denied admission to teacher education may begin the appeal process by making an appointment with his or her advisor. The appeal process can only be initiated after the student has received notification from the dean's office denying admission. A student and/or faculty member, who may serve as an advocate for the student, can initiate the teacher education appeals process.

Detailed information on the appeals process can be found in the student handbooks at the college website: www.uwrf.edu/college-of-education/. Students are responsible for checking the website for the information they will need.

Admission to Student Teaching or Interning

Admission to student teaching or interning is based on requirements of the Wisconsin Department of Public Instruction and the College of Education and Professional Studies. Current information is available in the Student Handbooks and list of dates at the college website: www.uwrf.edu/college-of-education/. Students are responsible for checking the website for the information they will need.

Conditions for Retention in Teacher Education Programs

If authorized personnel at the university have reasonable cause to question whether a student's physical or mental health will permit successful completion of the requirements of a professional program in the College of Education and Professional Studies, the department involved may, as a condition of admission to, continuation in, or graduation from the program, require that the
student be evaluated by appropriate professional personnel to help determine whether admission, continuation, or graduation should be permitted. A student may be notified at any time that termination from a program is being considered. At that time, the student or faculty advocate may initiate an appeal for consideration through the College of Education and Professional Studies Dean's Office.

Teacher Certification

All students who wish to become certified to teach in the state of Wisconsin must complete the following steps before an application form is submitted to the Wisconsin Department of Public Instruction:

1. Graduate and complete a teacher education program at this University with a grade point average of 2.75 overall in all previous course work.

2. Fill out an application form (PI-1602) available at the Dean of Education and Professional Studies Office.

3. Submit the application form to the Dean of Education and Professional Studies Office with a check for the appropriate fee made payable to the Wisconsin Department of Public Instruction.

Students who seek teacher certification in states other than Wisconsin should visit the college website at www.uwrf.edu/college-of-education/.

Human Relations in Teacher Education

It is the goal of the College of Education and Professional Studies to provide students who are enrolled in the teacher education program with curriculum and field-based experiences that reflect a multicultural perspective. To encourage the student's academic growth and experiences in human relations perspectives, the college requires successful completion of TED 252, a 50-hour field-based experience, and participation in a one-hour discussion group. The course is designed to promote the study of multicultural concepts and to assist students to consider the history and nature of interethnic interaction in American society. The 50-hour field-based experience is designed to enable prospective teachers to become directly involved with ethnically/racially diverse students or adults with whom they have had little or no experience. It also provides students to work with exceptional pupils in schools. It also encourages opportunities for students to serve the needs of academically and/or socially disadvantaged students in schools, community-based agencies, and in other appropriate settings where these conditions exist. Finally, the one-hour discussion group is an opportunity to share the experiences gained in the field with other students in the teacher education program.

Detailed information on the procedures for accomplishing the objectives of the human relations program can be obtained from a faculty advisor, the student handbooks at the college website: www.uwrf.edu/college-of-education/, and the Coordinator of Cultural Diversity in the Teacher Education Department.

Social Work

UW-RF offers students a Bachelor of Social Work degree (BSW- a major in Social Work). At the undergraduate level, this liberal arts course of study prepares a student for beginning, generalist, professional practice. The program is accredited by the Council on Social Work Education (CSWE), the nationally recognized accrediting organization in social work.
Social Work is the professional activity of helping individuals, groups, or communities enhance or restore their capacity for social functioning and creating societal conditions favorable to that goal. In general, social work is planned, purposeful intervention, based on professional knowledge, values, and skill that is aimed at both individual and social change. Social workers seek to strengthen and improve the capability of people and systems to cope with the task and problems they face in life and to promote improvements in the social environment which will enable human needs to be more adequately met.

Admission to Social Work

Admission to the BSW Program is competitive, and students holding an accredited BSW may receive recognition by accredited graduate schools of Social Work, leading to advanced standing toward a Master's of Social Work degree (MSW), the terminal practice degree in the profession. State licensing boards in Social Work recognize the BSW as meeting requirements to sit for licensure examinations.

Social Work is an active "doing" profession with a long history of caring for persons, and social change. Social workers are involved in wide-ranging tasks in many different public and private agencies. Some of the kinds of places social workers can be found include: child and adult protective services, counseling and mental health centers, probation and parole, neighborhood and community organizations, schools, employee assistance programs, labor unions, hospital and long term care facilities. Social Workers can be found almost any place where people and organizations come together.

BSW students engage in a two-semester fieldwork experience in their senior year. The experience is at least a 450-hour internship supervised by accredited social work field instructors. Over 60 agencies located in the Twin Cities of Minneapolis-St. Paul, Western Wisconsin and Eastern Minnesota participate to provide opportunities for real-world practice.

Any student may claim social work as a major and be advised by social work faculty. However, the Social Work Program does have a formal admission process. During the fall semester of the sophomore year, the student is required to submit a formal application to the program for acceptance into the major. The complete application along with the description of the admission process and the admission requirements is available in the Social Work Student Handbook. The following are among the requirements that must be met before the application can be submitted:

1. Successful completion of 36 semester credits;
2. Attainment of a cumulative grade point average of 2.25;
3. Completion of Social Work 150 and 205 with a grade of "C" or better and a major GPA of 2.50.

Meeting the above requirements does not guarantee admission to the program.

The following social work courses are open only to those who have been admitted to the Social Work Program: SOWK 324, 325, 424, 426, 472, 480 and 481.

Admission to Field Practicum

During the second semester of a student's junior year, the student applies for entry into the field practicum. A careful review of the student's academic record and potential for practice
performance is undertaken at this time. Only students who have completed all course prerequisites and have demonstrated competency in communication and helping skills, have demonstrated a commitment to social work values, and meet all requirements and standards for admission to the field program will be admitted to the field experience course. Some placements may require a criminal background check.

Students should be aware that admission requirements to the social work program and the field practicum include factors other than GPA, may change at any time and may differ from those listed here. Current requirements may be found in the Student Handbook and the Field Manual.

The program reserves the right to deny admission to any applicant on the basis of failure to meet any specified requirements or due to an excess of applicants over available slots. In addition, all those admitted must maintain a grade of "C" or better in all social work courses, a major GPA of at least 2.50 and a cumulative GPA of 2.25 in order to graduate with a BSW degree.
Accounting involves measuring business activities and communicating this information to investors, creditors, and other decision makers, who will use it to make sound, informed, financial decisions. This practice serves to encourage investment activity, which in turn creates jobs and helps the economy to grow. The program of study is based on a solid foundation in the liberal arts to provide the student with thinking, communication, writing, and human and value judgment skills. The tool courses (lower division requirements) develop the student's critical analytical, problem solving, and quantitative decision-making capabilities through a solid grounding in modern business and economic theory. It is the intention of the department to expose the student to the leading edge of theory while emphasizing the importance of human relationships and the ability to form sound ethical and moral decisions. In short, the program intends to equip the student for lifelong learning. Students are required to have a minimum of 150 semester credit hours in order to sit for the CPA exam in Wisconsin and forty other states. The 150 semester hours may be completed at the undergraduate or the graduate level. Students should consult their advisor for the best course of study. Students should plan to take MATH 146 (if necessary) before taking MATH 156 as required in General Education. The lower division requirements must be completed before the student begins the upper division requirements and the required accounting courses. A 2.5 grade point average must be maintained in the required accounting and business law courses to graduate with a major in accounting. This program is accredited by the Wisconsin State Board of Accountancy. Overall, one-half of the credits required for graduation must be taken outside of the School of Business and Economics. At least 50 percent of the business credits required must be taken in the UW-RF College of Business and Economics.

Careers in Accounting
Students interested in the following accounting career opportunities should select courses from those recommended below with the help of their advisor.

Certified Public Accountant
ACCT 324, 311 cr. hr.
Certified Management Accountant
ACCT 311; MNGT 318, 320, 361
International Accounting
ACCT 311; ECON 340, 342; MKTG 355; and one year of a modern language.
Accounting Systems Analyst
MNGT 318, 361, 365
Government or Non-profit Accounting
ACCT 324, 311

General Education Requirements
General Education Requirements as listed on pages pages 44-45 with the following exceptions: Mathematics: 3 cr. hrs.
MATH 156 Calculus for Business and Social Sciences
or ECON 205 Quantitative Analysis
or MNGT 205 Quantitative Analysis
or MATH 166 Calculus I (4 cr.)

Accounting Broad Area Major: 69 Total Credits

Lower Division Requirements (Tool Courses): 24 cr. hrs.

ECON 201 Principles of Microeconomics 3 cr. hrs.
ECON 202 Principles of Macroeconomics 3 cr. hrs.
ACCT231 Principles of Accounting I 3 cr. hrs.
ACCT232 Principles of Accounting II 3 cr. hrs.
MNGT 265 The Computer in Business 3 cr. hrs.
ECON 226 Introduction to Statistics 3 cr. hrs.
or MATH 226 Introduction to Statistics
BLAW 265 Business Law I 3 cr. hrs.
Choose one course from:
SCTA 116 Business and Professional Communication
ENGL 251 Advanced Composition
ENGL 266 Business Writing
ENGL 367 Technical Writing

Required Courses: 39 cr. hrs.
BLAW 266 Business Law II 3 cr. hrs.
MNGT 300 Management and Organizational Behavior 3 cr. hrs.
MKTG 310 Principles of Marketing 3 cr. hrs.
FINC 345 Managerial Finance 3 cr. hrs.
ACCT321 Intermediate Accounting I 3 cr. hrs.
ACCT322 Intermediate Accounting II 3 cr. hrs.
ACCT356 Managerial Cost Accounting 3 cr. hrs.
ACCT357 Advanced Managerial Cost Accounting 3 cr. hrs.
ACCT360 Federal Income Tax I 3 cr. hrs.
ACCT361 Federal Income Tax II 3 cr. hrs.
ACCT366 Accounting Systems 3 cr. hrs.
ACCT430 Advanced Accounting 3 cr. hrs.
ACCT461 Auditing 3 cr. hrs.

Directed Electives: 6 cr. hrs.
Select from Accounting (not ACCT201), Management (not MNGT 100, 150, or 205), Finance (not FINC 210), Marketing (not MKTG 311), ECON (not ECON 100 or 205), Computer Science (not CPTS 105 or 151), ENGL 251 or ENGL 367.

Agricultural Business
Department of Agricultural Economics (AGEC)
College of Agriculture, Food and Environmental Sciences

103 Agriculture Science Hall
(715) 425-3298
Web Site: www.uwrf.edu/ag-economics/

Nate Splett-Chair, Lewis May, Stanley Schraufnagel, James Shatava, Larry Swain, David Trechter.

General Education Requirements as listed on pages 26-27.
Agricultural Business Major: 59 Total Credits

Foundation Courses in Agriculture 15 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.

Required Courses: 30 cr. hrs.
AGEC 231 Agricultural Economics II 3 cr. hrs.
AGEC 250 World Food and Population 3 cr. hrs.
AGEC 320 Statistical Methods 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
AGEC 365 Agricultural Finance 3 cr. hrs.
AGEC 440 Agricultural Policy I (writing intensive) 3 cr. hrs.
AGEC 441 Agricultural Policy II 3 cr. hrs.
AGEC 442 Production Economics 3 cr. hrs.
AGEC 450 Introduction to Natural Resource Economics 3 cr. hrs.
AGEC 456 Commodity Marketing 3 cr. hrs.
Select A or B Below 14 cr. hrs.
A.
AGEC 240 Cooperatives 2 cr. hrs.
AGEC 305 Agricultural Business Accounting 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 368 Professional Selling (writing intensive) 3 cr. hrs.
AGEC 468 Agribusiness Firm Management (writing intensive) 3 cr. hrs.
B.
ECON 326 Statistical Methods for Economics and Business 3 cr. hrs.
ECON 426 Forecasting and Economics 3 cr. hrs.
AGEC 300 or 400 level courses 8 cr. hrs.

Required Supporting Courses: 3-4 cr. hrs.
MATH 156 Calculus for Business and Social Science 3 cr. hrs
or MATH 166 Calculus I (Fulfills the Mathematics General Education Requirement)

Computer literacy, including competency in spread sheets.

Directed Electives: 15 cr. hrs.
If A is selected above, then select 15 credits from one of the minors in the Agricultural Engineering Technology or Animal and Food Science or Plant and Earth Science departments
If B is selected above, then select MATH 166 and, with the consent of advisor, 15 credits from ECON, MATH, and/or CPTS.

Agricultural Business Minor: 24 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
AGEC 231 Agricultural Economics II 3 cr. hrs.
AGEC 240 Cooperatives 3 cr. hrs.
AGEC 305 Agricultural Business Accounting 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices (writing intensive) 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
or AGEC 365 Agricultural Finance
AGEC 368 Professional Selling (writing intensive) 3 cr. hrs.
AGEC 468 Agribusiness Firm Management (writing intensive) 3 cr. hrs.
Agricultural Economics Minor: 24 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
AGEC 231 Agricultural Economics II 3 cr. hrs.
AGEC 240 Cooperatives 3 cr. hrs.
AGEC 320 Statistical Methods 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices (writing intensive) 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
or AGEC 365 Agricultural Finance
AGEC 440 Agricultural Policy I (writing intensive) 3 cr. hrs.
AGEC 442 Agricultural Policy II (writing intensive) 3 cr. hrs.

Agricultural Education (AGED)
Department of Agricultural Education
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3555
Web Site: www.uwrf.edu/ag-education/

James Graham-Chair, Timothy Buttles, Tamia Trulson

General Education Requirements as listed on pages 47-48 with the following exceptions:
Communication:
ENGL 111, 112 Humanities and Fine Arts
ART 100 Introduction to Art
or MUS 100 Understanding Music
or SCTA 105 Introduction to Theatre and Drama
Non-Western History: PHIL 245 is not an option
Sciences to include:
BIOL 100 Introduction to Biology
ESM 300 Environmental Education
CHEM 111 General Chemistry I
CHEM 116 General Chemistry I Lab
CHEM 230 General Organic Chemistry
or BIOL 210 General Botany
or BIOL 230 General Zoology

Professional Education Requirements: 29 cr. hrs.
AGED 201 Introduction to Agricultural and Extension Education 3 cr. hrs.
TED 212 Educational Psychology: Middle and Secondary Education (writing intensive) 5 cr. hrs.
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
TED 440 Techniques of Middle/Secondary Education: Agriculture 3 cr. hrs.
TED 473 Student Teaching: Middle Level 6 cr. hrs.
TED 474 Student Teaching: Secondary 6 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.

CAFES Course Requirements: 51 Total Credits
Foundation Requirements-Select five: 14-15 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
AGR 161 Introduction to Plant Science 3 cr. hrs.  
or HORT 161 Introduction to Plant Science  
ANSC 111 Introduction to Animal Science 3 cr. hrs.  
FDSC 112 Introduction to Food Science 3 cr. hrs.  
SOIL 210 Introductory Soil Science 3 cr. hrs.  
ESM 109 Introduction to Forestry 2 cr. hrs.  

Agricultural Education Major: 30-32 cr. hrs.  
AGED 202 Leadership and Group Dynamics 3 cr. hrs.  
AGED 369 Philosophy of Vocational and Cooperative Education (writing intensive) 4 cr. hrs.  
AGED 403 Agricultural Education Programs and Youth Organizations (writing intensive) 3 cr. hrs.  
AGED 462 Curriculum Design in Vocational Education (writing intensive) 3 cr. hrs.  
ANSC 231 Principles of Nutrition 3 cr. hrs.  
AGR 257 Genetics 3 cr. hrs.  
or ANSC 257 Genetics  
HORT 169 Introduction to Horticulture 3 cr. hrs.  
Choose one of the following:  
AGEC 240 Cooperatives 2 cr. hrs.  
AGEC 355 Agricultural Markets and Prices (writing intensive)  
Choose one of the following:  
AGEC 360 Farm Management 3 cr. hrs.  
AGEC 468 Agribusiness Firm Management (writing intensive)  
Choose one of the following:  
AGEN 240 Structures 3 cr. hrs.  
AGEN 320 Internal Combustion Engines  
AGEN 325 Alternate Energy Systems  
AGEN 333 Landscape Construction  
AGEN 350 Applied Electricity  
AGEN 440 Soil and Water Conservation  
Directed CAFES Electives: 5-7 cr. hrs.  

Agricultural Engineering Technology (AGEN)  
Department of Agricultural Engineering Technology  
College of Agriculture, Food and Environmental Sciences  

164 Agricultural Engineering Annex, Agriculture Science Hall (715) 425-3985  
Web site: www.uwrf.edu/ag-engineering/  

Robert Butler-Chair, Jerry Nechville, Dean Olson, Derek Whitelock  

General Education Requirements as listed on pages 26-27 with the following exceptions:  
Social and Behavioral:  
ESM 105 Introduction to Environmental Studies, required for Environmental Engineering Technology Option  
Sciences:  
BIOL 100 or BIOL 150 or GEOL 101, CHEM 111, 116, PHYS 151 or 161 required.  
Mathematics: MATH 156 or MATH 166 required  

Foundation Courses in Agriculture: 12 cr. hrs.  
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.  
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
Choose one of the following: 3 cr. hrs.
ANSC 111 Introduction to Animal Science
FDSC 112 Introduction to Food Science
AGRN 161 Introduction to Plant Science
HORT 161 Introduction to Plant Science

Agricultural Engineering Technology Major: 51-60 Total Credits
Core Courses: 24 cr. hrs.
AGEN 240 Structures 3 cr. hrs.
AGEN 350 Applied Electricity 3 cr. hrs.
AGEN 352 Food and Process Engineering 3 cr. hrs.
AGEN 355 Irrigation and Drainage (writing intensive) 3 cr. hrs.
GENG 245 Materials Design Requirements 3 cr. hrs
GENG 265 Engineering Graphics 3 cr. hrs
GENG 368 CAD Applications 3 cr. hrs.
GENG 450 Engineering Project Management 3 cr. hrs.
PHYS 156 General Physics Laboratory 1 cr. hr.
or PHYS 101 General Physics Laboratory

Choose one of the following three options:
Agricultural Engineering Technology Option: 31-37 cr. hrs.
AGEN 320 Internal Combustion Engines 3 cr. hrs.
AGEN 361 Machinery and Power Mechanics 4 cr. hrs.
AGEN 363 Precision Agriculture Technology 3 cr. hrs.
AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. hrs.
GENG 235 Surveying 3 cr. hrs.

Choose two from:
AGEN 425 Environmental Engineering Technology 4 cr. hrs.
AGEN 443 Controlled Environment Systems 3 cr. hrs.
AGEN 455 Advanced Food and Process Engineering 3 cr. hrs.
AGEN 465 Fluid Power Systems 2 cr. hrs.

Choose two from:
AGEN 322 Analysis of Internal Combustion Engines 3 cr. hrs.
AGEN 325 Alternate Energy Systems 3 cr. hrs.
AGEN 365 Waste Management Systems (writing intensive) 3 cr. hrs.

Choose two from:
AGEN 255 Welding and Metal Manufacturing 3 cr. hrs.
GENG 201 Industrial Safety 2 cr. hrs.
GENG 236 Advanced Surveying 3 cr. hrs.
GENG 250 Statics 3 cr. hrs.
GENG 252 Dynamics 3 cr. hrs.
PHYS 152 General Physics II 4 cr. hr.
or PHYS 162 General Physics II

Environmental Engineering Technology Option 30-31 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hrs.
CHEM 117 General Chemistry Lab II 1 cr. hr. C
HEM 230 General Organic Chemistry 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hrs.
AGEN 365 Waste Management Systems (writing intensive) 3 cr. hrs.
AGEN 425 Environmental Engineering Technology 4 cr. hrs.
AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. hrs.
GENG 235 Surveying 3 cr. hrs.
Choose two from:
AGEN 325 Alternate Energy Systems 3 cr. hrs.
GEOL 445 Hydrogeology 3 cr. hrs.
AGEC 450 Introduction to Natural Resource Economics 3 cr. hrs.
ESM 360 Applied Hydrology and Water Quality 4 cr. hrs.
Mechanized Systems Management Option: 30-34 cr. hrs.
GENG 201 Industrial Safety 2 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
AGEC 305 Agricultural Accounting 3 cr. hrs.
AGEC 320 Statistical Methods 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 368 Professional Selling (writing intensive) 3 cr. hrs.
AGEC 468 Agribusiness Firm Management (writing intensive) 3 cr. hrs.
Choose two from:
AGEN 425 Environmental Engineering Technology 4 cr. hrs.
AGEN 443 Controlled Environment Systems 3 cr. hrs.
AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. hrs.
AGEN 455 Advanced Food and Process Engineering 3 cr. hrs.
AGEN 465 Fluid Power Systems 2 cr. hrs.
Choose two from:
AGEN 320 Internal Combustion Engines 3 cr. hrs.
AGEN 322 Analysis of Internal Combustion Engines 3 cr. hrs.
AGEN 325 Alternate Energy Systems 3 cr. hrs.
AGEN 361 Machinery and Power Mechanics 4 cr. hrs.
AGEN 363 Precision Agriculture Technology
AGEN 365 Waste Management Systems (writing intensive) 3 cr. hrs.
Required Supporting Courses: 4-14 cr. hrs.
Computer Literacy - students who are not prepared to use word processing and spreadsheet programs to complete assignments in Agricultural Engineering Technology courses should elect CPTS 105 in their freshman year.

Agricultural Engineering Technology MinorL: 22 Total Credits
Required Courses: 6 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Tech 3 cr. hrs.
GENG 265 Engineering Graphics 3 cr. hrs
Complete one of the following sets of courses: 7-10 cr. hrs.
1. AGEN 320 Internal Combustion Engines 3 cr. hrs.
AGEN 361 Machinery and Power Mechanics 4 cr. hrs.
AGEN 465 Fluid Power Systems 2 cr. hrs.
2. AGEN 350 Applied Electricity 3 cr. hrs.
AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. hrs.
GENG 368 CAD Applications 3 cr. hrs.
3. AGEN 352 Food and Process Engineering 3 cr. hrs.
AGEN 455 Advanced Food and Process Engineering 3 cr. hrs.
GENG 368 CAD Applications 3 cr. hrs.
4. AGEN 240 Structures 3 cr. hrs.
AGEN 333 Landscape Construction 3 cr. hrs.
GENG 450 Engineering Project Management 3 cr. hrs.
5. AGEN 355 Irrigation and Drainage (writing intensive) 3 cr. hrs.
AGEN 365 Waste Management Systems (writing intensive) 3 cr. hrs.
AGEN 425 Environmental Engineering Technology 4 cr. hrs.
Directed electives in Agricultural Engineering Technology or General Engineering: 6-9 cr. hrs

Agricultural Studies
College of Agriculture, Food and Environmental Sciences

Dean's Office-210 Agriculture Science Hall
(715) 425-3841
Web Site: http://www.uwrf.edu/college-of-agriculture/welcome.html

William Anderson-Dean

A four-year Bachelor of Science degree program. Students majoring in Agricultural Studies will acquire a broad knowledge of agriculture, and they will select a substantial number of elective courses to pursue special interests, either within or outside of the field of agriculture. In consultation with an advisor, students may choose elective courses in areas such as agronomy, animal science, communications, marketing, management, international studies, etc.

A minor in any agricultural subject area is required.

General Education Requirements as listed on pages 26-27 with the following exceptions:
Social and Behavioral:
ESM 105, Introduction to Environmental Studies

Sciences:
CHEM 111, 116, General Chemistry and Lab

Mathematics:
MATH 146, College Algebra, or equivalent

Foundation Requirements: 15 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science
ANSC 111 Introduction to Animal Science 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.

Agricultural Studies Major: 34 Total Credits
Choose one course from the following: 3 cr. hrs.
AGEC 305 Agricultural Accounting
AGEC 345 Agricultural Law
AGEC 355 Agricultural Markets and Prices
AGEC 360 Farm Management
AGEC 365 Agricultural Finance
Choose one course from the following: 3 cr. hrs.
AGED 110 Agricultural Communications
AGED 202 Leadership and Group Dynamics
Choose one course from the following: 3 cr. hrs.
AGEN 240 Structures
AGEN 320 Internal Combustion Engines
AGEN 325 Alternate Energy Systems
AGEN 333 Landscape Construction
AGEN 350 Applied Electricity
AGEN 352 Food and Process Engineering
AGEN 355 Irrigation and Drainage (writing intensive)
AGEN 361 Machinery and Power Mechanisms
AGEN 365 Waste Management Systems (writing intensive)
Choose one course from the following: 3-4 cr. hrs.
ANSC 231 Principles of Nutrition
ANSC 257 Genetics
ANSC 260 Animal Physiology (4 cr. hrs.)
Choose one course from the following: 3 cr. hrs.
AGRN 263 Forage Crop Production
AGRN 266 Corn and Soybean Production (writing intensive)
HORT 169 Introduction to Horticulture
Choose one course from the following: 4 cr. hrs.
SOIL 311 Soil Fertility
SOIL 440 Soil and Water Conservation
Also take: FDSC 112 Introduction to Food Science 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
and a 1-credit seminar class from one of the following:
ANSC 485, DASC 485, AGRN 485, HORT 485, ESM 485, or SOIL 485

Directed Electives: 7-8 cr. hrs.

Minor Required for the Agricultural Studies Major: 22 cr. hrs. Select a minor from any of the following:
- Agricultural Business
- Agricultural Economics
- Agronomy
- Farm Management
- Agricultural Engineering Technology
- Dairy Science
- Animal Science
- Conservation
- Environmental Science
- Food Science
- Geology
- Horticulture
- Hydrogeology
- Land Use Planning
- Outdoor Education
- Soil Science.

Agricultural Studies Minor: 22 Total Credits
Choose four courses from the following: 12 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science
AGEC 230 Agricultural Economics I 3 cr. hrs.
FDSC 112 Introduction to Food Science 3 cr. hrs.
ESM 105 Introduction to Environmental Studies 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGED 110 Agricultural Communications 3 cr. hrs.
Directed Electives 10 cr. hrs.

Agricultural electives at the 200 level or above. Courses meeting requirements for an Agriculture, Food and Environmental Sciences major cannot be counted as agricultural elective in this minor. Students with majors in the following areas are not eligible to receive this minor: Agricultural Business, Agricultural Engineering Technology, Agricultural Studies, Animal Science, Crop and Soil Science, Dairy Science.

Agronomy (AGRN)
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html
Agronomy Minor: 24 Total Credits
Required Courses: 18 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
AGRN 260 Plant and Seed Identification 2 cr. hrs.
AGRN 263 Forage Crop Production 3 cr. hrs.
AGRN 266 Corn and Soybean production (writing intensive) 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
SOIL 311 Soil Fertility 4 cr. hrs.
Directed Electives: 4 cr. hrs.
(consult with agronomy faculty for courses)

Animal Science (ANSC)
Department of Animal and Food Science
College of Agriculture, Food and Environmental Sciences

247 Agriculture Science Hall
(715) 425-3704
Web Site http://www.uwrf.edu/animal-science/welcome.html

General Education Requirements as listed on pages 26-27 with the following exceptions:
Sciences 8-9 cr. hrs.
BIOL 150 is required
CHEM 111 and CHEM 116 are required

Foundation Courses in Agriculture: 15 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
Select 4 from the following:
FDSC 112 Introduction to Food Science 3 cr. hrs.
AGEN 150 Introduction to Ag Engineering 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science
AGEC 230 Agricultural Economics I 3 cr. hrs.
SOIL 210 Introduction to Soils 3 cr. hrs.

Animal Science Major: 42-44 Total Credits
Required Courses: 25 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 232 Applied Feeds and Feeding 3 cr. hrs.
ANSC 257 Genetics 3 cr. hrs.
ANSC 260 Animal Physiology 4 cr. hrs.
ANSC 345 Animal Health 2 cr. hrs.
ANSC 346 Principles of Animal Breeding 3 cr. hrs.
ANSC 433 Advanced Nutrition 3 cr. hrs.
ANSC 448 Reproductive Physiology 3 cr. hrs.
ANSC 485 Seminar in Animal Science 1 cr. hr.

Species Emphasis:
Select A or B below

A. Meat Animals: 9 cr. hrs.
ANSC 140 Meat and Meat Products 3 cr. hrs.
Choose one from the following:
ANSC 365 Poultry Production 3 cr. hrs.
ANSC 366 Swine Production 3 cr. hrs.
ANSC 367 Beef Production 3 cr. hrs.
ANSC 368 Sheep Production 3 cr. hrs.
Choose one from the following:
FDSC 240 Meat Processing 3 cr. hrs.
ANSC 467 Feedlot Management 3 cr. hrs.
or another production course

B. Equine: 10 cr. hrs.
ANSC 167 Equine Management and Equitation 2 cr. hrs.
ANSC 168 Equine Equitation and Management Lab 2 cr. hrs.
ANSC 369 Equine Production 3 cr. hrs.
Choose one from the following:
ANSC 261 Advanced Horsemanship 3 cr. hrs.
ANSC 268 Balanced Seat Applications 3 cr. hrs.

Options: (Choose one option)
Production Option: 9 cr. hrs.
Choose one from the following:
AGEC 305 Agricultural Accounting 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 456 Commodity Marketing 3 cr. hrs.
Choose one from the following:
AGEN 240 Structures 3 cr. hrs.
AGEN 255 Welding and Metal Manufacturing 3 cr. hrs.
AGEN 320 Internal Combustion Engines 3 cr. hrs.
AGEN 350 Applied Electricity 3 cr. hrs.
AGEN 361 Machinery and Power Mechanics 3 cr. hrs.
AGEN 365 Waste Mgmt System 3 cr. hrs.
Choose one from the following:
HORT 169 Intro to Horticulture 3 cr. hrs.
AGRN 263 Forage Crop Production 3 cr. hrs.
AGRN 266 Corn and Soybean Production 3 cr. hrs.
AGRN 267 Small Grain and Miscellaneous Crop Production 3 cr. hrs.
Other required courses for the Production Option:
CHEM 230 Gen Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.

Business Option Select three: 9 cr. hrs.
AGEC 305 Agricultural Business Accounting 3 cr. hrs.
AGEC 345 Agricultural Law 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 365 Agricultural Finance 3 cr. hrs.
AGEC 368 Professional Selling 3 cr. hrs.
AGEC 440 Agricultural Policy I 3 cr. hrs.
AGEC 468 Agribusiness Firm Management 3 cr. hrs.
Other required courses for the Business Option:
CHEM 230 Gen Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.

Science Option 10 cr. hrs.
CHEM 231 Organic Chemistry I 3 cr. hrs.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
or CHEM 246 Synthetic and Analytical Techniques I
or CHEM 237 Organic Chemistry Lab II
or CHEM 247 Synthetic and Analytical Techniques II
PHYS 151 General Physics (meets Gen Ed requirement) 4 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
MATH 147 College Algebra and Trigonometry 3 cr. hrs.
Other required courses for the Science Option:
CHEM 112 General Chemistry 4 cr. hrs.
CHEM 117 General Chemistry Lab 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hrs.
Also select one of the following:
ANSC 447 Endocrinology 2 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
BIOL 240 Cell Biology 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
PHYS 152 General Physics II 4 cr. hrs.
Alternative Option 10 cr. hrs.
Any minor of 22-24 credits (other than Animal Science or Dairy Science). In addition to the minor the following three courses are required.
CHEM 230 General Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hrs.

Animal Science Minor: 22 Total Credits
Required Courses: 13 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 257 Genetics 3 cr. hrs.
ANSC 260 Animal Physiology 4 cr. hrs.
Electives (choose from any Animal Science course) 9 cr. hrs.

Anthropology (ANTH)
Department of Sociology, Anthropology, and Criminal Justice
College of Arts and Sciences
Anthropology Minor: 24 Total Credits
Required Courses: 12 cr. hrs.
SOC 100 Introduction to Sociology (counts 3 cr. hrs. in general education) or ANTH 100
Introduction to Anthropology (counts 3 cr. hrs. in general education)
Choose one of the following courses:
SOC 221 Global Perspectives on Women 3 cr. hrs.
ANTH 221 Global Perspectives on Women 3 cr. hrs.
SOC 225 Sociology of Race and Ethnicity 3 cr. hrs.
ANTH 225 Sociology of Race and Ethnicity 3 cr. hrs.
Take the following courses:
ANTH 247 Human Diversity and Development 3 cr. hrs.
ANTH 348 Faces of Culture 3 cr. hrs.
Choose one of the following courses:
ANTH 228 Native American Cultures 3 cr. hrs.
SOC 338 Global Perspectives on Health and Disease 3 cr. hrs.
ANTH 338 Global Perspectives on Health and Disease 3 cr. hrs.
SOC 211 Global Perspectives on Children 3 cr. hrs.
ANTH 211 Global Perspectives on Children 3 cr. hrs.
Electives in Sociology/Anthropology: 12 cr. hrs.
At least 6 credits must be at the 300/400 level.

ART (ART) Department of Art-College of Arts and Sciences
172 Kleinpell Fine Arts
(715) 425-3266
Web Site: www.uwrf.edu/art

Michael Padgett-Chair, Carol Chase, Morgan Clifford, Jim Engebretson, Bernice Ficek-Swenson,
David Heberlein, Lynn Jermal, Randy Johnston, Maren Kloppmann, Patrice Wernlund

Careers in Advertising Design and Computer Graphics. Students interested in a career in advertising
design and computer graphics are advised to take a Broad Area Art Degree choosing options within
the degree to become as broadly and professionally prepared as possible. An internship is
recommended in the senior year. Advisor: M. Padgett.

Careers in Art Therapy. Students interested in a career in art therapy are advised to take an art
major degree with a psychology minor. A program sheet to guide minor elective choices is available
in the art department. Graduate school (M.A.) is required for registration in the field. Internships
are available for senior students. Advisor: L. Jermal.

Semester Abroad Program. Each fall semester, art majors may participate in the Study Abroad
Program, do an independent research project in a European country of their choice, and receive six
credit hours in ART 378 and six credit hours of INTS 377. Participants must meet weekly for
perparatory sessions during the spring semester preceding the experience abroad. Advisor: D.
Heberlein.
Internship Program. The art department offers a number of opportunities for students to gain on-the-job experience as a supplement to their academic preparation. Students work under the direct supervision of a job supervisor and a member of the art faculty. See ART 379 for details. Advisor: M. Padgett.

Art Materials. Students are expected to buy some materials for most art courses. Material fees are required for some studio areas.

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.
Bachelor of Fine Arts -Liberal Arts: 66 Total Credits
(no minor required)
Foundation Courses in Art: 20 cr. hrs.
ART 121 Design Foundation 3 cr. hrs.
ART 131 Drawing I 3 cr. hrs.
ART 132 Drawing II 3 cr. hrs.
ART 211 Western Art to 1500 3 cr. hrs.
ART 212 Art History Since 1500 3 cr. hrs.
ART 309 Gallery Techniques 1-3 cr. hrs.
ART 320 Drawing from the Figure 3 cr. hrs.
ART 485 Senior Seminar 1 cr. hr.
Required Courses: 46 cr. hrs.
Choose 18 credits from:
ART 225 Advertising Design I 3 cr. hrs.
ART 226 Introduction to Fibers 3 cr. hrs.
ART 227 Introduction to Clay 3 cr. hrs.
ART 228 Introduction to Metal 3 cr. hrs.
ART 229 Introduction to Glass 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 236 Introduction to Graphics 3 cr. hrs.
ART 238 Introduction to Painting 3 cr. hrs.
Major Studio Area-Choose 15 credits from:
ART 326 Studio-Fibers 3 cr. hrs.
ART 327 Studio-Clay 3 cr. hrs.
ART 328 Studio-Metals 3 cr. hrs.
ART 329 Studio-Glass 3 cr. hrs.
ART 335 Studio-Photography 3 cr. hrs.
ART 336 Studio-Graphics 3 cr. hrs.
ART 338 Studio-Painting 3 cr. hrs.
Minor Studio Area-Choose 6 credits.
May choose from major studio courses listed above or the following:
ART 407 Introduction to Art Therapy 3 cr. hrs.
Choose 4 credits from:
ART 311 American Art to 1865 3 cr. hrs.
ART 312 American Art Since 1865 3 cr. hrs.
ART 314 Art of China, India and Japan 2 cr. hrs.
ART 318 Latin American Art 2 cr. hrs.
Electives: 6 cr. hrs.
Outside the Art Department with prior approval of advisor.
Required Supporting Courses 9 cr. hrs.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>Introduction to Anthropology</td>
<td>3 cr. hrs.</td>
</tr>
<tr>
<td>PHIL 235</td>
<td>Philosophy of the Arts</td>
<td>3 cr. hrs.</td>
</tr>
<tr>
<td>ENGL 231</td>
<td>The Short Story</td>
<td>3 cr. hrs.</td>
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<tr>
<td>ENGL 232</td>
<td>Contemporary Drama</td>
<td>3 cr. hrs.</td>
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<tr>
<td>ENGL 233</td>
<td>Introduction to Poetry</td>
<td>3 cr. hrs.</td>
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<tr>
<td>ENGL 234</td>
<td>Modern Novels</td>
<td>3 cr. hrs.</td>
</tr>
<tr>
<td>ENGL 341</td>
<td>European Literature</td>
<td>3 cr. hrs.</td>
</tr>
<tr>
<td>HUM 255</td>
<td>Arts and Ideas I</td>
<td>4 cr. hr.</td>
</tr>
<tr>
<td>HUM 256</td>
<td>Arts and Ideas II</td>
<td>4 cr. hrs.</td>
</tr>
<tr>
<td>IHUM 498</td>
<td>Senior Level Interdisciplinary Capstone-Humanities</td>
<td>2 cr. hrs.</td>
</tr>
<tr>
<td>MUS 200</td>
<td>American Music</td>
<td>3 cr. hrs.</td>
</tr>
<tr>
<td>MUS 234</td>
<td>Music History and Literature I</td>
<td>4 cr. hrs.</td>
</tr>
<tr>
<td>MUS 235</td>
<td>Music History and Literature II</td>
<td>4 cr. hrs.</td>
</tr>
<tr>
<td>SCTA 121</td>
<td>Acting I: Basic Techniques</td>
<td>3 cr. hrs.</td>
</tr>
<tr>
<td>SCTA 131</td>
<td>Design for the Theatre</td>
<td>3 cr. hrs.</td>
</tr>
<tr>
<td>SCTA 200</td>
<td>Introduction to Film Studies</td>
<td>3 cr. hrs.</td>
</tr>
</tbody>
</table>

Broad Area Art Major-Liberal Arts or Education Broad Area Art Major- (no minor required) 56 Total Credits

Foundation Courses in Art: 20 cr. hrs.
- ART 121 Design Foundation 3 cr. hrs.
- ART 131 Drawing I 3 cr. hrs.
- ART 132 Drawing II 3 cr. hrs.
- ART 211 Western Art to 1500 3 cr. hrs.
- ART 212 Art History Since 1500 3 cr. hrs.
- ART 253 Art in the Schools 4 cr. hrs.
- ART 485 Senior Seminar 1 cr. hr.

Required Courses Major Program: 36 cr. hrs.
- Choose 18 credits from:
  - ART 225 Advertising Design I 3 cr. hrs.
  - ART 226 Introduction to Fibers 3 cr. hrs.
  - ART 227 Introduction to Clay 3 cr. hrs.
  - ART 228 Introduction to Metal 3 cr. hrs.
  - ART 229 Introduction to Glass 3 cr. hrs.
  - ART 235 Introduction to Black and White Photography 3 cr. hrs.
  - ART 236 Introduction to Graphics 3 cr. hrs.
  - ART 238 Introduction to Painting 3 cr. hrs.

- Choose 16 credits from:
  - ART 303 Advertising Design II 3 cr. hrs.
  - ART 309 Gallery Techniques 1-3 cr. hrs.
  - ART 320 Drawing from the Figure 3 cr. hrs.
  - ART 326 Studio-Fibers 3 cr. hrs.
  - ART 327 Studio-Clay 3 cr. hrs.
  - ART 328 Studio-Metals 3 cr. hrs.
  - ART 329 Studio-Glass 3 cr. hrs.
  - ART 335 Studio-Photography 3 cr. hrs.
  - ART 336 Studio-Graphics 3 cr. hrs.
  - ART 338 Studio-Painting 3 cr. hrs.

- Choose 2 credits from:
  - ART 407 Introduction to Art Therapy 3 cr. hrs.
  - ART 408 Art Therapy Group Process 3 cr. hrs.
ART 311 American Art to 1865 3 cr. hrs.
ART 312 American Art Since 1865 3 cr. hrs.
ART 314 Art of China, India and Japan 2 cr. hrs.
ART 318 Latin American Art 2 cr. hrs.

Art Major-Liberal Arts (with minor or additional major)
Major Requirements 36 Total Credits
Foundation Courses in Art as listed for Broad Area Art Major: 16 cr. hrs.
Required Courses: 20 cr. hrs.
Choose 12 credits from: ART 225 Advertising Design I 3 cr. hrs.
ART 226 Introduction to Fibers 3 cr. hrs.
ART 227 Introduction to Clay 3 cr. hrs.
ART 228 Introduction to Metal 3 cr. hrs.
ART 229 Introduction to Glass 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 236 Introduction to Graphics 3 cr. hrs.
ART 238 Introduction to Painting 3 cr. hrs.
Choose 8 credits from:
ART 303 Advertising Design II 3 cr. hrs.
ART 309 Gallery Techniques 1-3 cr. hrs.
ART 320 Drawing from the Figure 3 cr. hrs.
ART 326 Studio-Fibers 3 cr. hrs.
ART 327 Studio-Clay 3 cr. hrs.
ART 328 Studio-Metals 3 cr. hrs.
ART 329 Studio-Glass 3 cr. hrs.
ART 335 Studio-Photography 3 cr. hrs.
ART 336 Studio-Graphics 3 cr. hrs.
ART 338 Studio-Photography 3 cr. hrs.
ART 407 Introduction to Art Therapy 3 cr. hrs.
ART 408 Art Therapy Group Process 3 cr. hrs.

Art Minor: 24 Total Credits
Foundation Courses in Art: 9 cr. hrs.
Choose 9 credits from:
ART 121 Design Foundation 3 cr. hrs.
ART 131 Drawing I 3 cr. hrs.
ART 211 West Art to 1500 3 cr. hrs.
ART 212 West Art Since 1500 3 cr. hrs.
Electives in Art: 6 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.
ART 226 Introduction to Fibers 3 cr. hrs.
ART 227 Introduction to Clay 3 cr. hrs.
ART 228 Introduction to Metal 3 cr. hrs.
ART 229 Introduction to Glass 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 236 Introduction to Graphics 3 cr. hrs.
ART 238 Introduction to Painting 3 cr. hrs.
Select from any Art courses: 9 cr. hrs.

Biology (BIOL)
Karen Klyczek-Chair, Mark Bergland, Clarke Garry, Douglas Johnson, Timothy Lyden, E. Katherine Miller, Bradley Mogen, Kim Mogen, Grace Thornhill, John Wheeler

The Biology Department offers a 34-credit major for Liberal Arts and Education majors, and a 22-credit minor. A degree with a Biology major also requires completion of a minor and additional supporting courses in Chemistry, Mathematics, and Physics.

General Education Requirements: BA and BS Liberal Arts majors as listed on page 34-35. BS Education majors as listed on page 47-48. Courses in the major or required supporting courses may be double counted to satisfy the General Education science requirements. Therefore, the total General Education credit hour requirement is reduced by the courses that can be double-counted.

Biology Major-Liberal Arts and Education: 34 Total Credits
Core Requirements: 21 cr. hrs.
BIOL 150 General Biology 3 cr. hrs.
BIOL 110 Freshman Colloquium in Biology 1 cr. hr.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 350 Genetics and Evolution (writing intensive) 3 cr. hrs.
BIOL 360 Ecology (writing intensive) 3 cr. hrs.
BIOL 410 Senior Colloquium in Biology 1 cr. hr.
BIOL 481 Seminar (Liberal Arts majors) 1 cr. hr.
or BIOL 471 Laboratory Experiences (Education majors) 1 cr. hr.
Directed Electives: 13 cr. hrs.
Choose from any Biology courses except BIOL 253
Required Supporting Courses: 21-22 Total Credits
CHEM 111,112 General Chemistry I and II 10 cr. hrs.
CHEM 116,117 General Chemistry Lab I and II 5 cr. hrs.
PHYS 151,156 General Physics I and General Physics Lab I 5 cr. hrs.
MATH 147 College Algebra and Trigonometry 3 cr. hrs.
Liberal Arts majors also choose one from:
MATH 216 Elementary Statistical Concepts 3 cr. hrs.
MATH 226 Fundamentals of Statistics 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
Education majors also take:
GEOL 101,102 Introductory Geology and Introductory Geology Lab 4 cr. hr.

Biology Minor: 22 Total Credits
Required Courses: 18 cr. hr.
BIOL 150 General Biology 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
The Biotechnology major is an interdisciplinary program that is focused on the molecular basis of life processes and the techniques utilized to both study and control these processes under in vivo and in vitro conditions. The Biotechnology curriculum draws upon the expertise and course offerings of the participating departments: Biology, Chemistry, Animal and Food Science, and Plant and Earth Science. Students complete core programs in Biology and Chemistry, which lead to minors in both areas, and a 33-semester hour, interdepartmental course requirement. The Biotechnology major is designed to provide those students who are interested in pursuing careers at the interface of biology and chemistry with the academic background required to either secure entry level positions in the biotechnology industry or to continue their education in graduate or professional schools. A student may elect to complete a B.S. degree in Biotechnology in either the College of Arts and Sciences, (715) 425-3777, or the College of Agriculture, Food and Environmental Sciences (715) 425-3841.

General Education Requirements: BA and BS Liberal Arts majors as listed on pages 34-35. BS Education majors as listed on pages 47-48.
Courses in the major or required supporting courses may be double counted to satisfy the General Education science requirements. Therefore, the total General Education credit hour requirement is reduced by the courses that can be double-counted.

Biotechnology Major: 71 Total Credits
Core Requirements: 41 cr. hrs.
Biology Core 19 cr. hrs.
BIOL 150 General Biology 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
or BIOL 230 General Zoology
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.
BIOL 350 Genetics and Evolution (writing intensive) 3 cr. hrs.
BIOL 453 Virology 3 cr. hrs.
Chemistry Core 22 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
CHEM 231 Organic Chemistry I 3 cr. hrs.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.

Interdepartmental Course Requirements 30 cr. hrs.
Required Courses 22 cr. hrs.
FDSC 335 Food Microbiology 4 cr. hrs.
FDSC 460 Fermentation Technology 3 cr. hrs.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Lab (writing intensive) 1 cr. hr.
HORT 369 Plant Tissue Culture: Theory and Practice 3 cr. hrs
or BIOL 463 Animal Cell Culture
BIOL 451 Molecular Biology 4 cr. hrs.
BIOT 480 Biotechnology Seminar 1 cr. hr.

Directed Electives: 8 cr. hrs.
Six credits must be at the 300/400 level. Four credits of internship may be substituted for the 300/400 level course requirement.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 260 Animal Physiology 4 cr. hr.
ANSC 341 Biometrics 3 cr. hrs.
ANSC 346 Principles of Animal Breeding (writing intensive) 3 cr. hrs.
ANSC 447 Endocrinology 2 ANSC 448 Reproductive Physiology 3 cr. hrs.
ANSC 490 Independent Study in Animal Science 1-3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
or BIOL 230 General Zoology
BIOL 295 Laboratory Research Experience 2 cr. hrs.
BIOL 314 Plant Pathology 3 cr. hrs.
BIOL 320 Plant Physiology 3 cr. hrs.
BIOL 341 Anatomy and Physiology I 4 cr. hrs.
BIOL 342 Anatomy and Physiology II 4 cr. hrs.
BIOL 345 Immunology 3 cr. hrs.
BIOL 353 Histology 4 cr. hrs.
BIOL 360 Ecology (writing intensive) 3 cr. hrs.
BIOL 495 Undergraduate Research 3 cr. hrs.
BIOL 499 Independent Study 1-3 cr. hrs.
BIOL 463 Animal Cell Culture 3 cr. hrs.
or HORT 369 Plant Tissue Culture: Theory and Practice
CHEM 295 Introduction to Undergraduate Research 1 cr. hr.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 340 Physical Chemistry of Biological Systems 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 452 Instrumental Analysis 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.
FDSC 112 Introduction to Food Science 3 cr. hrs.
FDSC 302 Dairy Manufacturing II 3 cr. hrs.
FDSC 312 Food Processing 4 cr. hrs.
FDSC 360 Food Chemistry 3 cr. hrs.
FDSC 461 Food Analysis 4 cr. hrs.
FDSC 490 Independent Study in Food Science 1-3 cr. hrs.
HORT 161 Introduction to Plant Science 3 cr. hrs.
HORT 169 Introduction to Horticulture 3 cr. hrs.
HORT 200 Plant Propagation 3 cr. hrs.
AGRN 263 Forage Crop Production 3 cr. hrs.
AGRN 410 Plant Breeding and Crop Improvement (writing intensive) 3 cr. hrs.
AGRN 435 Crop Physiology 4 cr. hrs.
AGRN 490 Independent Study in Agronomy 1-3

Required Supporting Courses 14 cr. hrs.
MATH 166 Calculus I 4 cr. hrs.

Either sequence A or B below:
A. PHYS 151 General Physics I 4 cr. hrs.
PHYS 152 General Physics II 4 cr. hrs.
PHYS 156 General Physics Laboratory I 1 cr. hr.
PHYS 157 General Physics Laboratory II 1 cr. hr.
B. PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hrs.
PHYS 162 General Physics II 4 cr. hrs.

Business Administration
Department of Business Administration
College of Business and Economics

315 North Hall
(715) 425-3335
Fax: (715) 425-0707
Web Site: http://www.uwrf.edu/sbe/

Jacque Foust-Chair, Charles Corcoran, Brian Huffman, Claire Kilian, Robert Milam, Darryl Miller,
Douglas Ohmer, Reza Rahgozar, Ellen Schultz-freshman and sophomore advisor.

Students majoring in Business Administration have varied opportunities to select a program to
meet specific interests. One choice is to complete a Business Administration degree with a minor
or double major. Another is to pursue a Broad Area Business Administration degree with an option
in Marketing, Management, or Finance. A minor is not required with the Broad Area Major in
Business Administration. Overall, one-half of the credits required for graduation with a degree in
Accounting or Business must be taken outside of the College of Business and
ECONomics. Fifty percent of the business credits must be earned at the College of Business and
ECONomics at UW-River Falls.

General Education Requirements as listed on pages pages 44-45. The general education
mathematics requirement for business majors can be met by taking ECON/MNGT 205-Quantitative
Analysis, MATH 156 Calculus for Business and Social Sciences, or MATH 166-Calculus I.

Business Administration Major (with a minor or double major): 45-48 Total Credits
Lower Division 21-24 cr. hrs.
Required of all majors before enrolling in any upper level division courses.
ECON 201 Principles of Microeconomics 3 cr. hrs.
ECON 202 Principles of Macroeconomics 3 cr. hrs.
ACCT231 Principles of Accounting I 3 cr. hrs.
ACCT232 Principles of Accounting II 3 cr. hrs.
MNGT 265 The Computer in Business 3 cr. hrs.
ECON 226 Introduction to Statistics 3 cr. hrs.
or MATH 226 Introduction to Statistics
BLAW 265 Business Law I 3 cr. hrs.
SCTA 116 Business and Professional Communication (waived if taken as GenEd) 3 cr. hrs.
or ENGL 266 Business Writing
Upper Division 24 cr. hrs.
MNGT 300 Management and Organizational Behavior 3 cr. hrs.
MKTG 310 Principles of Marketing 3 cr. hrs.
FINC 345 Managerial Finance 3 cr. hrs.
ECON 326 Statistical Methods for Economics and Business 3 cr. hrs.
or MNGT 326 Statistical Methods for Economics and Business
MNGT 361 Operations Management 3 cr. hrs.
MNGT 485 Senior Seminar 3 cr. hrs.
Business Electives: 6 cr. hrs.
Courses 300 level or higher from MKTG, MNGT or FINC, with the exception of FINC 210

Business-Broad Area Major (with an option, no minor required)
Lower and Upper Division Courses listed above 45-48 cr. hrs.

Finance Option 66-69 Total Credits
FINC 347 Financial Institutions 3 cr. hrs.
FINC 348 Investments 3 cr. hrs.
FINC 446 Intermediate Managerial Finance 3 cr. hrs.
Directed Electives: 12 cr. hrs.
Minimum of 6 credits must be in Finance
ACCT 321 Intermediate Accounting I
ACCT 322 Intermediate Accounting II
ACCT 346 Managerial Cost
ECON 302 Intermediate Macroeconomics
MNGT 318 Operations Research/Management Science
FINC 210 Personal Finance
FINC 314 Principles of Insurance
FINC 342 International Finance
FINC 379 Internship-Finance
FINC 389 Special Topics in Finance
FINC 448 Portfolio Management
Business Electives:
MNGT or MKTG courses 300 level or above 6 cr. hrs.

Management Option 72-75 Total Credits
Lower and Upper Division Courses listed above: 45-48 cr. hrs. Business Electives: Courses 300 level or higher from
MKTG, MNGT or FINC, with the exception of FINC 210 18 cr. hrs.
Support Electives: 9 cr. hrs.
Select from approved list in consultation with advisor.
Students pursuing the Management Option are encouraged to select a specialization either in international business, human resources or operations. Business electives and support electives
should support this specialization. Suggested business courses are:
International:
FINC 342 International Finance
MNGT 355 International Business
MNGT 380 International Business Seminar
Human Resources:
MNGT 320 Human Resource Management
MNGT 324 Labor Economics
MNGT 480 Human Resource Management Seminar
Operations:
MNGT 316 Managerial Economics
MNGT 318 Operations Research
MNGT 350 Decision Making
MNGT 365 Management Information Systems

Marketing Option 72-75 Total Credits
Lower and Upper Division Courses listed above 45-48 cr. hrs. Marketing Electives: 18 cr. hrs.
choose from the following
MKTG 312 Consumer Behavior
MKTG 325 Sales Effectiveness
MKTG 334 Direct Marketing
MKTG 340 Services Marketing
MKTG 379 Internship-Marketing
MKTG 389 Special Topics in Marketing
MKTG 352 Business to Business Marketing
MKTG 445 Marketing Strategy
MKTG 355 International Marketing
MKTG 499 Independent Study
MKTG 365 Marketing Research
Support Electives: 9 cr. hrs.
choose from the following
ECON 316 Managerial Economics
POLS 256 Public Policymaking
ECON 340 International Trade
POLS 260 International Relations
ECON 342 International Finance
PSYC 265 Social Psychology
GEOG 250 Cartography I
PSYC 305 Learning and Motivation
MNGT 310 Culture and Business
MNGT 330 Managing Workplace Diversity
PSYC 310 Memory and Thinking
MNGT 389 Special Topics in Management: Multi-Media (only)
PSYC 320
PSYC 336 Developmental Psychology: Adulthood and Aging
SCTA 306 Nonverbal Communication
PSYC 365 Individual and Group Processes
SCTA 311 Persuasion
SCTA 316 Organizational Communication

Business Administration Minor: 24 Total Credits
(Prerequisites: ECON 201, 202, 226)
Required Courses 15 cr. hrs.
ACCT201 Survey of Accounting 3 cr. hrs.
(or ACCT231 and ACCT232, Principles of Accounting I and II)
BLAW 265 Business Law I 3 cr. hrs.
MNGT 265 The Computer in Business 3 cr. hrs.
FINC 345 Managerial Finance 3 cr. hrs.
MNGT 300 Management and Organizational Behavior 3 cr. hrs.
MKTG 310 Principles of Marketing 3 cr. hrs.
Business Electives: 9 cr. hrs.
Courses 300 level or higher from
MKTG, MNGT or FINC, with the exception of FINC 210

Chemistry (CHEM)
Department of Chemistry
College of Arts and Sciences

253 Centennial Science Hall
(715) 425-3523
Web Site: www.uwrf.edu/chemistry

Sheue Keenan-Chair, Marilyn Duerst, Mike Kahlow, Mike Keenan, Lisa Kroutil, Daniel Marchand, Kevin McLaughlin, Barb Nielsen, Magdalena Pala, Karl Peterson, David Rainville, Jeff Rosenthal, David Rusterholz.

The Chemistry Department offers several options for chemistry majors, all of which are based on a core curriculum with additional requirements based on each option.
1. The Bachelor of Science regular option chemistry major is designed for students who desire a general education in chemistry as a background for careers in many fields such as polymer science, environmental analysis, industrial chemistry, materials science, various fields related to medical science, etc. This consists of 35 credit hours distributed among the major fields of chemistry.
2. The ACS-Approved regular option chemistry major is offered for those students who wish to pursue a more intensive program in chemistry approved by the American Chemical Society. This program includes the courses in the Bachelor of Science chemistry major and additional advanced courses. It is particularly recommended for students who intend to go to graduate school or work in the chemical industry. A course in computer use or programming and one year of foreign language are strongly recommended.
3. The biochemistry options are for those students who wish to pursue a career in biotechnology, the medical sciences or who desire a strong background in the chemistry of biological systems. The biochemistry program may be based on the Bachelor of Science major or the ACS Approved major. The ACS-Approved major is recommended for the student who plans to attend graduate school.
4. The education option chemistry major is designed for prospective secondary school teachers. The curriculum is planned so as to give the student (1) a broad general education, (2) specialized preparation in chemistry with a minor in a supporting field and (3) professional training necessary for effective teaching.
5. The polymer option is designed for those students who wish to pursue a career in the chemical industry working with new materials for applications in aerospace, electronics, medicine, building, and transportation industries. Students completing this option will be prepared to directly enter the chemical industry or go on to graduate school in areas of study such as polymers or material science. The polymer option is based on the ACS-Approved major. Note: Substitution of other
courses for degree requirements is possible upon application and approval by the department. This is on a case-by-case basis and particularly may affect students who change to a chemistry major or who transfer to UW-RF. Students should confer with their advisor and/or the department chair. The Department of Chemistry at UW-RF is approved by the American Chemical Society. Students who are interested in pursuing advanced training in chemistry may obtain an ACS-Approved degree by taking several additional chemistry courses. Within the required supporting courses, the calculus-based physics courses 161, 162, 101, 102 are required for the ACS-Approved Option.

General Education Requirements: BA and BS Liberal Arts majors as listed on pages 34-35. BS Education majors as listed on pages 47-48. Courses in the major or required supporting courses may be double counted to satisfy the General Education science requirements. Therefore, the total General Education credit hour requirement is reduced by the courses that can be double-counted.

Core Requirements for all chemistry major programs: 21 cr. hrs. CHEM 111 General Chemistry I 4 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hrs.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
CHEM 231 Organic Chemistry I 3 cr. hrs.

Core Requirements for all chemistry major programs
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
CHEM 480 Chemical Communications and Research (writing intensive) 1 cr. hr.

Required Supporting Courses: 14-21 cr. hrs.
MATH 166 Calculus I 4 cr. hrs.
MATH 167 Calculus II 4 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.

Choose one of the following two physics series A. or B.: 10 cr. hrs.
A. PHYS 151 General Physics I
PHYS 152 General Physics II
PHYS 156 General Physics Laboratory I
PHYS 157 General Physics Laboratory II
B. PHYS 161 General Physics I
PHYS 162 General Physics II
PHYS 101 General Physics Laboratory I
PHYS 102 General Physics Laboratory II

Chemistry Major- Liberal Arts: 35-37 Total Credits
Core Requirements 21 cr. hrs.
Required Supporting Courses (not counted in total for major) 14-21 cr. hrs.
Regular Option Required Courses: 11 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
Directed Electives for the Regular Option: 3 cr. hrs.
Choose from:
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 432 Advanced Organic Chemistry 3 cr. hrs.
CHEM 452 Instrumental Analysis 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.

Biochemistry Option
Required Courses: 16 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
CHEM 495 Undergraduate Research 1 cr. hr.
Choose option A. or B. below: 6 cr. hrs.
A. CHEM 341 Chemical Thermodynamics and Kinetics
CHEM 342 Molecular Structure and Spectroscopy
B. CHEM 340 Physical Chemistry of Biological Systems
CHEM 432 Advanced Organic Chemistry
If option B. is chosen, MATH 167 and 266 are not required.
Additional required supporting courses, biochemistry option only: 6 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 350 Genetics and Evolution (writing intensive) 3 cr. hrs.

Chemistry Major- Education

Major Requirements - Secondary Education 35 Total Credits
Core Requirements: 21 cr. hrs.
Required Supporting Courses: (not counted in total for major) 21 cr. hrs.
Secondary Education Option
Required Courses: 14 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.

Chemistry Major ACS-Approved: 42-47 Total Credits
Core Requirements 21 cr. hrs.
Required Supporting Courses (not counted in total for major) 21 cr. hrs.
ACS Regular Option
Required Courses: 19 cr. hrs.
CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. hrs.
CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. hr.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.
Directed Electives for the Regular Option—choose from: 3 cr. hrs.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 416 Polymer Laboratory 1 cr. hr.
CHEM 432 Advanced Organic Chemistry 3 cr. hrs.
CHEM 452 Instrumental Analysis 3 cr. hrs.
CHEM 489 Special Topics in Chemistry .5-3 cr. hrs.
ACS Biochemistry Option
Required Courses: 21 cr. hrs.
CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. hrs.
CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. hr.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
Additional required supporting courses, biochemistry option only: 10 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 350 Genetics and Evolution (writing intensive) 3 cr. hrs.
BIOL 451 Molecular Biology 4 cr. hr.
ACS Polymer Option
Required Courses: 26 cr. hrs.
Option I
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
or CHEM 495 Undergraduate Research 1 cr. hr.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 416 Polymer Laboratory 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.
Option II

CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. hrs.
CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. hr.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 416 Polymer Laboratory 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.

Chemistry Major - Dual Degree (Engineering)
This major is awarded jointly with a B.S. in engineering after the student has successfully completed a three-year program at UW-River Falls with a minimum grade point average of 3.0 and a two-year program at either UW Madison or the University of Minnesota.

Required courses 23 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
CHEM 231 Organic Chemistry I 3 cr. hrs.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. hrs.
CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. hr.
CHEM 251 Analytical Chemistry 2 CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
Credits transferred from Engineering School 30 cr. hrs.

Required supporting courses at UW-RF 34 cr. hrs.
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 211 Scientific Programming 3 cr. hrs.
PHYS 264 General Physics 4 cr. hr.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 331 Differential Equations 3 cr. hrs.
PHYS 211 Scientific Programming 3 cr. hrs.

Chemistry Minor - Liberal Arts and Education Minor: 22-24 Total Credits

Required Courses: 10 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
Directed electives: Liberal Arts Minor: 12 cr. hrs.
or Secondary Education Minor: 14 cr. hrs.
At least one course must be at the 300 level or above.
CHEM 231 Organic Chemistry I 3 cr. hrs.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 340 Physical Chemistry of Biological Systems 3 cr. hrs.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 416 Polymer Laboratory 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 432 Advanced Organic Chemistry 3 cr. hrs.
CHEM 452 Instrumental Analysis 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.

Coaching
Department of Health and Human Performance
College of Education and Professional Studies

111 Karges Center
(715) 425-3705
Web Site http://www.uwrf.edu/hhp/

Chair-Connie Foster, Debra Allyn, Betsy Barrett, Richard Bowen, Kevin Bullis, Gary Eloranta, Patti Ford, Steve Freeman, Tom Journell, Douglas Naylor, John O'Grady, Faye Perkins, Robert Ritzer, Susan Tarr, Jim Theis, Karla Zhe

Coaching Minor: 24 Total Credits
Required Courses: Prerequisite 18 cr. hrs.
SFED 200 First Aid and Basic Life Support 3 cr. hrs.
HEAL 262 Human Anatomy and Physiology (or HEAL 263 and 366) 3 cr. hrs.
PED 213 Care and Prevention of Athletic Injury 2 cr. hrs.
PED 354 Biomechanics 3 cr. hrs.
PED 363 Psychology of Coaching 2 cr. hrs.
PED 465 Scientific Principles of Conditioning 2 cr. hrs.
PED 472 Coaching Practicum 3 cr. hrs.
Coaching Theory Classes: Required to take at least two 6 cr. hrs. PED 352 Coaching Women's Gymnastics 2 cr. hrs.
PED 356 Tennis Coaching 2 cr. hrs.
PED 358 Track Coaching 2 cr. hrs.
PED 359 Volleyball Coaching 2 cr. hrs.
PED 364 Wrestling Coaching 2 cr. hrs.
PED 365 Football Coaching 2 cr. hrs.
PED 366 Swimming Coaching 2 cr. hrs.
PED 367 Basketball Coaching 2 cr. hrs.
PED 368 Ice Hockey Coaching 2 cr. hrs.
PED 369 Baseball/Softball Coaching 2 cr. hrs.
Students may satisfy this 6 cr. requirement by choosing a maximum of 2 cr. from the following or
taking an additional coaching theory class:
PED 166 Football Officiating 1 cr. hr.
PED 167 Basketball Officiating 1 cr. hr.
PED 168 Officiating Women's Gymnastics 1 cr. hr.
PED 351 Coaching Young Athletes 2 cr. hrs.

Communicative Disorders (COMD)
Department of Communicative Disorders
College of Education and Professional Studies

B31 Wyman Education Building
(715) 425-3801
Web Site: http://www.uwrf.edu/comm-dis/

Paul Hayden-Chair, Lori Burgess, Gary Cottrell, Mike Harris, Tom Jensen, Nan Jordahl, Marie Stadler,
Deirdre Worrell

General Education Requirements: BA and BS Liberal Arts majors as listed on pages 34-35. BS Education majors as listed on pages 47-48.

Communicative Disorders Major - Liberal Arts and Education: 39 Total Credits
Required Courses: 36 cr. hrs.
COMD 262 Speech Systems 4 cr. hr.
COMD 263 Phonetics 3 cr. hrs.
COMD 264 Speech Science 3 cr. hrs.
COMD 275 Practicum: Observation/Discussion 1 cr. hr.
COMD 350 Articulatory and Phonological Disorders 3 cr. hrs.
COMD 360 Introduction to Audiology 4 cr. hr.
COMD 375 Case Discussions: Speech/Language (writing intensive) 2 cr. hrs.
COMD 460 Voice Disorders 3 cr. hrs.
COMD 461 Language Development and Disorders 4 cr. hr.
COMD 463 Behavior Modification/Stuttering 3 cr. hrs.
COMD 466 Aural Rehabilitation 3 cr. hrs.
COMD 379 Clinical Experience Internship 3 cr. hrs.
Directed Electives: 3 cr. hrs.
COMD 160 Introduction to Communicative Disorders 3 cr. hrs.
COMD 163 Communicative Disorders for the Elementary Teacher 3 cr. hrs.
COMD 331 Fear of Speaking 3 cr. hrs.
COMD 351 Cleft Palate/Orofacial Anomaly 3 cr. hrs.
COMD 361 Speech and Language for Hearing Impaired 3 cr. hrs.
COMD 364 Aphasia 3 cr. hrs.
COMD 370 Practicum: Fear of Speaking 3 cr. hrs.
COMD 450 Infant Stimulation 3 cr. hrs.
COMD 451 Augmentative/Alternative Communication Systems 3 cr. hrs.
COMD 452 Dysphagia/Rehabilitation 3 cr. hrs.
COMD 453 Alaryngeal Speech 3 cr. hrs.
COMD 462 Language Appraisal and Intervention 3 cr. hrs.
COMD 465 Current Issues/Research 2 cr. hrs.
COMD 468 Screening and Assessment Procedures 3 cr. hrs.
COMD 469 American Sign Language 3 cr. hrs.
Professional Education Requirements: 18-29 cr. hrs.
TED 211 Educational Psychology: Elementary Education 5
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
or TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.
TED 439 Techniques of Middle/Secondary Education: Communicative Disorders 3 cr. hrs.
TED 475 Student Teaching: K-12 1-12 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.

Communicative Disorders Minor: Three different emphases 22 Total Credits
Required Courses: 4 cr. hrs.
COMD 160 Introduction to Communicative Disorders 3 cr. hrs.
or COMD 163 Comm Disorders for Elementary Teacher (School Age Emphasis)
COMD 275 Practicum: Observation/Discussing 1 cr. hr.

COMD Electives-Choose 3 courses from:
COMD 262 Speech Systems 4 cr. hr.
COMD 263 Phonetics 3 cr. hrs.
COMD 350 Articulatory and Phonological Disorders 3 cr. hrs.
COMD 351 Cleft Palate/Orofacial Anomaly 3 cr. hrs.
COMD 360 Introduction to Audiology 4 cr. hr.
COMD 451 Augmentative/Alternative Communication Systems 3 cr. hrs.
COMD 461 Language Development and Disorders 4 cr. hr.
COMD 462 Language Appraisal and Intervention 3 cr. hrs.
COMD 466 Aural Rehabilitation 3 cr. hrs.
Early Childhood Directed Electives: 9 cr. hrs.
Choose 3 courses from: ENGL 250 Literature for Children 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
PSYC 201 Behavioral Statistics 3 cr. hrs.
PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. hrs.
PSYC 260 Behavior Modification 3 cr. hrs.
PSYC 305 Learning and Motivation 3 cr. hrs.
PSYC 310 Memory and Thinking 3 cr. hrs.
PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
TED 225 Developmental Learning Experiences of Young Children 3 cr. hrs.
TED 255 Reading Guidance for Children 3 cr. hrs.
TED 330 Infant Toddler Development 3 cr. hrs.

2. School Age Emphasis COMD Electives: 9 cr. hrs.
Choose 3 courses from:
COMD 262 Speech Systems 4 cr. hr.
COMD 263 Phonetics 3 cr. hrs.
COMD 331 Fear of Speaking 3 cr. hrs.
COMD 350 Articulatory and Phonological Disorders 3 cr. hrs.
COMD 351 Cleft Palate/Orofacial Anomaly 3 cr. hrs.
COMD 360 Introduction to Audiology 4 cr. hr.
COMD 451 Augmentative/Alternative Communication Systems 3 cr. hrs.
COMD 460 Voice Disorders 3 cr. hrs.
COMD 461 Language Development and Disorders 4 cr. hr.
COMD 462 Language Appraisal and Intervention 3 cr. hrs.
COMD 463 Behavior Modification/Stuttering 3 cr. hrs.
COMD 466 Aural Rehabilitation 3 cr. hrs.
School Age Directed Electives: 9 cr. hrs.
Choose 3 courses from: COUN 410 Introduction to Counseling 3 cr. hrs.
ENGL 250 Literature for Children 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
PSYC 201 Behavioral Statistics 3 cr. hrs.
PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. hrs.
PSYC 260 Behavior Modification 3 cr. hrs.
PSYC 305 Learning and Motivation 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
TED 255 Reading Guidance for Children 3 cr. hrs.
PSYC 420 Introduction to Learning Disabilities 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.
Directed electives that are applicable for Learning Disability certification are COMD 461, PSYC 420 and TED 461
Choose 3 courses from:
COMD 262 Speech Systems 4 cr. hr.
COMD 263 Phonetics 3 cr. hrs.
COMD 331 Fear of Speaking 3 cr. hrs.
COMD 350 Articulatory and Phonological Disorders 3 cr. hrs.
COMD 360 Introduction to Audiology 4 cr. hr.
COMD 364 Aphasia 3 cr. hrs.
COMD 451 Augmentative/Alternative Communication Systems 3 cr. hrs.
COMD 452 Dysphagia/Rehabilitation 3 cr. hrs.
COMD 460 Voice Disorders 3 cr. hrs.
COMD 463 Behavior Modification/Rehabilitation 3 cr. hrs.
Adult Directed Electives: 9 credits
choose 3 courses from the following:
COUN 410 Introduction to Counseling 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
PSYC 201 Behavioral Statistics 3 cr. hrs.
PSYC 260 Behavior Modification 3 cr. hrs.
PSYC 305 Learning and Motivation 3 cr. hrs.
PSYC 310 Memory and Thinking 3 cr. hrs.
PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SOCI 315 Sociology of Later Life 3 cr. hrs.
SOCI 300 Research Methods (writing intensive) 3 cr. hrs.
or SOWK 300 Research Methods

Computer Systems (CPTS)
Department of Computer Systems
College of Business and Economics
General Education Requirements as listed on pages pages 44-45.

Computer Systems Major
Computer Science Option: 36 Total Credits
This option offers its graduates the common foundation for analysis and design of computer systems. Graduates will develop skills relevant to the analysis, design and implementation of sophisticated software/hardware systems and will have knowledge and skills of one or more computer systems, programming languages, and operating systems. Graduates will be well prepared to assume responsible and challenging positions in the computing profession or for graduate work in the computer science field. This major is offered in the College of Arts and Sciences and students must meet College of Arts and Sciences requirements.

Required Courses: 28 cr. hrs. CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 241 Assembly Language 3 cr. hrs.
CPTS 351 Computer Organization 3 cr. hrs.
CPTS 361 Introduction to System Programming 3 cr. hrs.
CPTS 416 Structure of Programming Languages 3 cr. hrs.
CPTS 429 Operating Systems 3 cr. hrs.
CPTS 484 Seminar (writing intensive) 1 cr. hr.
Directed Electives: 8 cr. hrs. To be selected from 200-400 CPTS courses in consultation with advisor
Required supporting math courses: 12 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.

Computer Information Systems Option: 36 Total Credits
This option offers its graduates the common foundation for analysis and design of information systems with an emphasis on computerizing information. Graduates will develop skills relevant to the analysis, design and implementation of sophisticated information systems and will have knowledge and skills of one or more programming languages, Database Management Systems, and analysis and design methodologies. Graduates will be well prepared to assume responsible and challenging positions in the information system profession or for graduate work in information systems. Students with this major in the College of Business and Economics must have a Business Administration minor or double major. Required Courses: 28 cr. hrs. CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 241 Assembly Language 3 cr. hrs.
CPTS 323 Structured COBOL Programming 3 cr. hrs.
CPTS 333 Database Management Systems 3 cr. hrs.
CPTS 423 Introduction to Systems Analysis 3 cr. hrs.
CPTS 433 Design Analysis MIS 3 cr. hrs.
CPTS 484 Seminar (writing intensive) 1 cr. hr.
Directed Electives: 8 cr. hrs.
To be selected from 200-400 CPTS courses in consultation with advisor
Required supporting math courses: 7-8 cr. hrs.
MATH 156 Calculus for Business and Social Science 3 cr. hrs
or MATH 166 Calculus I 4 cr. hr.

Management Information Systems Option: 36-37 Total Credits
This option offers its graduates the foundation of information systems and the inclusion of management courses. Graduates will develop skills relevant to the analysis, design and implementation of sophisticated information systems and will have a foundation in fundamental management skills and practices. Graduates will be well prepared to assume responsible and challenging positions in the management of information systems or for graduate work in a business field. Students in MIS must have a Business Administration minor or double major. Prerequisites: 9 cr. hrs.
ECON 205 Quantitative Analysis 3 cr. hrs.
or MNGT 205 Quantitative Analysis
MATH 156 Calculus for Business and Social Science
or MATH 166 Calculus I (meets general education math requirement)
ECON 226 Intro Statistics 3 cr. hrs.
or MATH 226 Fundamentals of Statistics
MNGT 265 The Computer in Business 3 cr. hrs.

Required Courses: 28 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 333 Database Management Systems 3 cr. hrs.
CPTS 423 Introduction to Systems Analysis 3 cr. hrs.
CPTS 484 Seminar (writing intensive) 1 cr. hr.
ACCT231 Principles of Accounting I 3 cr. hrs.
FINC 345 Principles of Managerial Finance 3 cr. hrs.
MNGT 361 Operations Management 3 cr. hrs.
MNGT 365 Management Information Systems 3 cr. hrs.
Directed Electives 8 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 323 Structured COBOL Programming 3 cr. hrs.
CPTS 325 Web Development II 3 cr. hrs.
CPTS 327 JAVA Programming 3 cr. hrs.
CPTS 343 Software Engineering 3 cr. hrs.
CPTS 361 Introduction to System Programming 3 cr. hrs.
CPTS 379 Internship Computer Science 3-12 cr. hrs.
CPTS 433 Design Analysis MIS 3 cr. hrs.
CPTS 441 Computer Networks 3 cr. hrs.
ACCT366 Accounting Systems 3 cr. hrs.
MNGT 316 Managerial Economics 3 cr. hrs.
MNGT 318 Operations Research/Management Science 3 cr. hrs.
MNGT 379 Internship
MNGT (limit of 3 credits total for business electives) 2-6
MNGT 389 Special Topics in Management (to be selected in consultation with advisor) .5-3

Education Option: 35 Total Credits
This option is designed to meet the certification requirements in the state of Wisconsin for secondary school computer science teachers.

**Required Courses: 26 cr. hrs.**

- CPTS 161 Programming I 3 cr. hrs.
- CPTS 162 Programming II 3 cr. hrs.
- CPTS 235 Object-Oriented Programming 3 cr. hrs.
- CPTS 236 Data Structures 3 cr. hrs.
- CPTS 241 Assembly Language 3 cr. hrs.
- CPTS 301 Computers and Modern Society (writing intensive) 2 cr. hrs.
- CPTS 351 Computer Organization 3 cr. hrs.
- CPTS 361 Introduction to System Programming 3 cr. hrs.
- CPTS 416 Structure of Programming Languages 3 cr. hrs.

**Directed Electives 9 cr. hrs.**

To be selected from 200-400 CPTS courses in consultation with advisor.

**Required supporting math courses: 7-8 cr. hrs.**

- MATH 156 Calculus for Business and Social Science 3 cr. hrs.
- or MATH 166 Calculus I 4 cr. hr.
- MATH 236 Discrete Mathematics 4 cr. hr.

**Computer Systems Minor**

**Computer Science Option: 24 Total Credits**

- Required courses 18 cr. hrs.
- CPTS 161 Programming I 3 cr. hrs.
- CPTS 162 Programming II 3 cr. hrs.
- CPTS 235 Object-Oriented Programming 3 cr. hrs.
- CPTS 236 Data Structures 3 cr. hrs.
- CPTS 241 Assembly Language 3 cr. hrs.
- CPTS 351 Computer Organization 3 cr. hrs.

**Directed electives 6 cr. hrs.**

To be selected from 200-400 CPTS courses in consultation with advisor.

**Required supporting math courses: 12 cr. hrs.**

- MATH 166 Calculus I 4 cr. hr.
- MATH 167 Calculus II 4 cr. hr.
- MATH 236 Discrete Mathematics 4 cr. hr.

**Information Systems Option: 24 Total Credits**

- Required courses 18 cr. hrs.
- CPTS 161 Programming I 3 cr. hrs.
- CPTS 162 Programming II 3 cr. hrs.
- CPTS 235 Object-Oriented Programming 3 cr. hrs.
- CPTS 236 Data Structures 3 cr. hrs.
- CPTS 333 Database Management Systems 3 cr. hrs.
- CPTS 423 Introduction to Systems Analysis 3 cr. hrs.

**Directed electives 6 cr. hrs.**

To be selected from 200-400 CPTS courses in consultation with advisor.

**Required supporting math courses: 7-8 cr. hrs.**

- MATH 156 Calculus for Business and Social Science 3 cr. hrs.
- MATH 166 Calculus I 3 cr. hrs.
- MATH 236 Discrete Mathematics 4 cr. hr.

**Management Information Systems Option: 24 Total Credits**

Intended for students with an accounting or business administration major; students with other majors should select the Computer Information Systems minor.
Prerequisites: 9 cr. hrs.
ECON 205 Quantitative Analysis in Economics and business 3 cr. hrs.
or MNGT 205 Quantitative Analysis in Economics and business
or MATH 156 Calculus for Business and Social Science
or MATH 166 Calculus I (meets general education math requirement)
ECON 226 Intro Statistics 3 cr. hrs.
or MATH 226 Foundations in Statistics
MNGT 265 The Computer in Business 3 cr. hrs.
Required courses 24 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 333 Database Management Systems 3 cr. hrs.
CPTS 423 Introduction to Systems Analysis 3 cr. hrs.
MNGT 316 Managerial Economics 3 cr. hrs.
MNGT 318 Operations Research/Management Science 3 cr. hrs.
MNGT 365 Management Information Systems 3 cr. hrs.
Education Option 23 Total Credits
Required courses 20 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 241 Assembly Language 3 cr. hrs.
CPTS 351 Computer Organization 3 cr. hrs.
CPTS 301 Computers and Modern Society 2 cr. hrs.
Directed electives: 3 cr. hrs. To be selected from 200-400 CPTS courses in consultation with advisor.
Required supporting math courses: 7-8 cr. hrs.
MATH 156 Calculus for Business and Social Science 3 cr. hrs.
or MATH 166 Calculus I
or 4 MATH 236 Discrete Mathematics 4 cr. hr.

Conservation
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html

Robert W. Baker-Chair, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove,
Michael Crotser, Terry L. Ferriss, Michael C. Kaltenberg, Kerry L. Keen, N. Larry Meyers, Michael D.
Middleton, Lanny Neel, Eric M. Sanden, Brian R. Smith, Roger A. Swanson, Donovan H. Taylor, Laine
Vignona, Ian S. Williams.

The Conservation major is designed to meet the academic needs of students interested in a career
dealing with the natural environment. The major has the flexibility to accommodate interests in
natural resource management, soil and water conservation, environmental education, pollution
control, environmental regulations and law enforcement, and the like, depending on the students
course selection of directed electives.

General Education Requirements as listed on pages pages 26-27 with the following exceptions:
Social and Behavioral: ESM 105 required
Sciences: GEOL 101, CHEM 111, 116, and BIOL 100 required.

Conservation Major
Conservation Core 47-49 cr. hrs.
ESM 109 Introduction to Forestry 2 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. hrs.
ESM 270 Internship I 2-4 cr. hr.
ESM 303 Environmental Policies and Administration 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 343 Woodlot Management 3 cr. hrs.
ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
ESM 363 GIS Application in Resource Management 3 cr. hrs.
ESM 485 Seminar in Resource Management 1 cr. hr.
SOIL 210 Introductory Soil Science 3 cr. hrs.
SOIL 440 Soil and Water Conservation 4 cr. hr.
AGEC450 Introduction to Natural Resource Economics 3 cr. hrs.
BIOL 344 Wildlife Biology 4 BIOL 360 Ecology 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
or BIOL 230 General Zoology or 3 cr. hrs.
Required Supporting Courses 14 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 117 General Chemistry Laboratory II 1 cr. hr.
ENGL 367 Technical Writing 3 cr. hrs.
AGED 202 Leadership and Group Dynamics 3 cr. hrs.
or SCTA 208 Problem Solving in Small Group Communication
AGEC230 Agriculture Economics I 3 cr. hrs.
or ECON 201 Principles of Microeconomics
Directed Electives: 15-17 cr. hrs.
ACCT201, 231, 232, AGEC 320, 345, AGED 202, AGEN 325, 333, 365, AGRN 345, 462, ANSC 
231, 257, 260, BIOL 240, 310 320, 324, 330, 333, 350, 354, 355, 434, 444, BLAW 265, CHEM 
200, 230, 251, 256, 356, 452, CJ 202, 320, 322, 376, 430, ECON 202, 205, ESM 300, 307, 
365, 370, 411, 413, 435, 490, FINC 210, 345, GENG 235, GEOG 250, 255, 360, 368, 450, 460, 
GEOL 202, 269, 327, 330, 417, 445, HORT 250, 452, INTS 200, JOUR 260, 265, MATH 147, 166, 
MKTG 310, MNGT 300, 430, MODL PE D 201,202, 301, 371, PHIL 303, PHYS 151, 152, POLS 355, 
PSYC 201, SOCI 245, SOIL, 311, 325, 350, 460
Select one:
ECON 226, MATH 226, ANSC 341
Select one: ESM 307 or any other Diversity Course

Conservation Minor: 22 Total Credits
ESM 105 Introduction to Environmental Studies 3 cr. hrs.
ESM 109 Introduction to Forestry 2 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
ESM 343 Woodlot Management 3 cr. hrs.
ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
SOIL 210 Introductory Soil Science 3 cr. hrs.
SOIL 440 Soil and Water Conservation 4 cr. hr.

Criminal Justice (CJ)
Department of Sociology, Anthropology, and Criminal Justice
College of Arts and Sciences

326 Kleinpell Fine Arts Building
(715) 425-3992 cr. hrs.
Web Site: www.uwrf.edu/sociology/

Brian E. Copp - Chair, Tricia Davis, Jean Hector Faley, Clifford Mottaz, Timothy E. Nissen, Edward Robins, Rich Wallace

Minor in Criminal Justice-Sociology Major: 24 Total Credits Required Courses: 12 cr. hrs.
SOCI 100 Introduction to Sociology (counts 3 cr. hrs. in Gen. Ed.)
or ANTH 100 Introduction to Anthropology (counts 3 cr. hrs. in Gen. Ed.) CJ 202 Introduction to Criminal Justice 3 cr. hrs.
CJ 320 Juvenile Delinquency 3 cr. hrs.
CJ 322 Criminology 3 cr. hrs.
CJ 430 Trends and Issues in Incarceration 3 cr. hrs.
or CJ 435 Alternatives to Incarceration
Directed Electives: 12 cr. hrs.
CJ 376 Criminal Justice Certification Internship 6
or CJ 379 Criminal Justice Internship or 6-12 cr. hrs.
Choose 6 credits from the following courses:
In no case may a course be double counted for credit in both the CJ minor and Sociology major.
SOCI 218 Deviant Behavior 3 cr. hrs.
CJ 310 Gangs in the U.S. 3 cr. hrs.
SOCI 340 Sociology of Rural Life 3 cr. hrs.
SOCI 345 Sociology of Urban Life 3 cr. hrs.
SOCI 445 Power and Inequality 3 cr. hrs.
PSYC 325 Abnormal Psychology 3 cr. hrs.
POLS 225 Introduction to Public Administration 3 cr. hrs.
POLS 253 State and Local Politics 3 cr. hrs.
POLS 354 Women and the Law 3 cr. hrs.
POLS 416 Constitutional Law 3 cr. hrs.

Minor in Criminal Justice-Non-Sociology Major: 24 Total Credits Required Courses: 18 cr. hrs.
SOCI 100 Introduction to Sociology (counts 3 cr. in Gen. Ed.)
or ANTH 100 Introduction to Anthropology (counts 3 cr. in Gen. Ed.) SOCI 200 Sociological Inquiry 3 cr. hrs.
CJ 202 Introduction to Criminal Justice 3 cr. hrs.
CJ 320 Juvenile Delinquency 3 cr. hrs.
CJ 322 Criminology 3 cr. hrs.
CJ 430 Trends and Issues in Incarceration 3 cr. hrs.
or CJ 435 Alternatives to Incarceration
SOCI 445 Power and Inequality 3 cr. hrs.
Directed Electives: 6 cr. hrs.
SOCI 208 Sociology of Diversity 3 cr. hrs.
SOCI 225 Sociology of Race and Ethnicity 3 cr. hrs.
or ANTH 225 Sociology of Race and Ethnicity
SOCI 218 Deviant Behavior 3 cr. hrs.
SOCI 240 Social Problems 3 cr. hrs.
CJ 310 Gangs in the U.S. 3 cr. hrs.
SOCI 330 Social Organizations 3 cr. hrs.
CJ 376 Law Enforcement Certification Internship 6
CJ 379 Criminal Justice Internship 6-12 cr. hrs.
SOCI 410 Social Psychology 3 cr. hrs.

Crops and Soils
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html


General Education Requirements as listed on pages pages 26-27

Crop and Soil Science Major
Foundation Courses in Agriculture 12 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGEC230 Agricultural Economics I 3 cr. hrs.
Select one from:
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
FDSC 112 Introduction to Food Science 3 cr. hrs.
Major Requirements 64 Total Credits
Required Courses: 14 cr. hrs.
AGRN 263 Forage Crop Production 3 cr. hrs.
AGRN 266 Crop and Soybean Production 3 cr. hrs.
SOIL 311 Soil Fertility 4 cr. hr.
SOIL 440 Soil and Water Conservation 4 cr. hr.
Options (choose one):
Crop Science Option 43-45 cr. hrs.
AGRN 257 Genetics 3 cr. hrs.
AGRN 260 Plant and Seed Identification 2 cr. hrs.
AGRN 345 Weed Control 3 cr. hrs.
AGRN 410 Plant Breeding and Crop Improvement 3 cr. hrs.
AGRN 435 Crop Physiology 4 cr. hr.
AGRN 451 Integrated Pest Management 3 cr. hrs.
AGRN 485 Seminar in Agronomy 1 cr. hr.
ANSC 341 Biometrics 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
AGBI 252 Agricultural Biochemistry Laboratory Techniques 1 cr. hr.
BIOL 314 Plant Pathology 3 cr. hrs.
BIOL 333 Entomology 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
Select one course from the following:
AGEN 363 Precision Agricultural Technology 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
HORT 327 Vegetable Science and Production 4 cr. hr.
HORT 347 Fruit Science and Production 4 cr. hr.
HORT 455 Turfgrass Science and Management 3 cr. hrs.
SOIL 350 Pedology 4 cr. hr.
Select one course from the following:
AGEC 355 Agricultural Marketing and Production 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 368 Professional Selling 3 cr. hrs.
Select one course from the following:
AGRN 267 Small Grain and Miscellaneous Crop Production 3 cr. hrs.
AGRN 363 Pasture Management 2 cr. hrs.
AGRN 462 Agricultural Ecology 2 cr. hrs.
Directed Electives 7-9 cr. hrs.
Soil Science Option 37-42 cr. hrs.
SOIL 325 Hydric Soils and Wetland Environments 3 cr. hrs.
SOIL 350 Pedology 4 cr. hr.
SOIL 460 Soil Physics 3 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
GEOL 102 Introductory Geology Lab 1 cr. hr.
ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
ENGL 367 Technical Writing 3 cr. hrs.
SCTA 211 Public Speaking 3 cr. hrs.
Select one course from the following:
AGRN 257 Genetics 3 cr. hrs.
AGRN 260 Plant and Seed Identification 2 cr. hrs.
AGRN 267 Small Grain and Miscellaneous Crop Production 3 cr. hrs.
AGRN 345 Weed Control 3 cr. hrs.
AGRN 363 Pasture Management 2 cr. hrs.
AGRN 435 Crop Physiology 4 cr. hr.
AGRN 462 Agricultural Ecology 2 cr. hrs.
Select two courses from the following:
GEOL 327 Geomorphology and Glacial Geology 4 cr. hr.
AGRN 451 Integrated Pest Management 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 314 Plant Pathology 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.
BIOL 333 Entomology 3 cr. hrs.
Select one course from the following:
AGEC320 Statistical Methods 3 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
Dairy Science (dasc)
Department of Animal and Food Science
College of Agriculture, Food and Environmental Sciences

247 Agriculture Science Hall
(715) 425-3704
Web Site http://www.uwrf.edu/animal-science/welcome.html

Anthony Jilek-Chair, Larry Baumann, Perry Clark, Dennis Cooper, Philip George, Thomas Goerke, Lawrence Kasten, Steven Kelm, Ranee May, Peter Rayne, Stephen Ridley, Purnendu C. Vasavada, Bonnie Walters, Steve Watters

The Animal and Food Science Department offers three options for dairy science majors. Required core courses within the Dairy Science major are identical, regardless of option. Additional requirements are based on the choice of option. The Dairy Science - Management option is designed for students seeking careers in dairy farm management or supporting industries such as feed, pharmaceutical, or genetics sectors of the dairy industry. The Dairy Science - Science option is designed for students that plan to enroll in graduate or professional degree programs following completion of the Bachelor of Science degree. This option is strongly suggested for students that hope to enroll in a college of veterinary medicine at a future date. The Dairy Science - Minor option is designed for students who wish to supplement their education with an academic minor or second major.

General Education Requirements as listed on pages pages 26-27 with the following exception: PHYS 151 or 161 required for Science option

Foundation Courses in Agriculture: 12 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
Select 3 from the following:
FDSC 112 Introduction to Food Science 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science
AGEC 230 Agricultural Economics I 3 cr. hrs.
SOIL 210 Introduction to Soils 3 cr. hrs.

Dairy Science Major: 63-65 Total Credits
Required Courses: 35 cr. hrs.
DASC 120 Orientation to Dairy Science 1 cr. hr.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 232 Applied Feeds and Feeding 3 cr. hrs.
ANSC 257 Genetics 3 cr. hrs.
ANSC 260 Animal Physiology 4 cr. hr.
DASC 306 Dairy Production 3 cr. hrs.
ANSC 345 Animal Health 2 cr. hrs.
ANSC 346 Principles of Animal Breeding 3 cr. hrs.
DASC 404 Lactation and Milk Quality 3 cr. hrs.
DASC 406 Advanced Dairy Management 3 cr. hrs.
ANSC 433 Advanced Nutrition 3 cr. hrs.
or DASC 436 Dairy Cattle Nutrition or 3 cr. hrs.
ANSC 448 Physiology of Reproduction 3 cr. hrs.
DASC 485 Seminar in Dairy Science 1 cr. hr.
Select Management, Science, or Minor Option:
Management Option 25 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
DASC 270/370 Internship I/Internship II 4 cr. hr.
Choose two from:
AGEC305 Agricultural Business Accounting 3 cr. hrs.
AGEC345 Agricultural Law 3 cr. hrs.
AGEC360 Farm Management 3 cr. hrs.
AGEC365 Agricultural Finance 3 cr. hrs.
Additional directed electives: 9 cr. hrs.
Students may select any combination of courses offered by Food Science, Agricultural Education, Agricultural Economics, Agricultural Engineering, Plant and Earth Science, or the College of Business and Economics. At least 6 credit hours must be earned from courses at the 200 level or higher.
Science Option 28-30 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 117 General Chemistry Lab II 1
CHEM 231 Organic Chemistry I 3 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
MATH 147 College Algebra and Trigonometry 3 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.
Choose one from the following:
BIOL 230 General Zoology 3 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
PHYS 152 General Physics II 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
ANSC 447 Endocrinology 2 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
Minor Option 28-30 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
Additional required courses and directed electives: 22-24
Students completing the Dairy Science major with the minor option may complete any minor or second major (other than the Animal Science major or minor) offered by the University of Wisconsin-River Falls.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 232 Applied Feeds and Feeding 3 cr. hrs.
ANSC 257 Genetics 3 cr. hrs.
ANSC 345 Animal Health 2 D
ASC 120 Orientation to Dairy Science 1 cr. hr.
DASC 306 Dairy Production 3 cr. hrs.
CAFES Electives 12 cr. hrs.

Dairy Science Minor: 22-24
Total Credits Required Courses: 18 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 232 Applied Feeds and Feeding 3 cr. hrs.
ANSC 257 Genetics 3 cr. hrs.
DASC 306 Dairy Production 3 cr. hrs.
Choose two courses from:
DASC 404 Lactation and Milk Quality 3 cr. hrs.
DASC 406 Advanced Dairy Management 3 cr. hrs.
DASC 436 Dairy Cattle Nutrition 3 cr. hrs.
Directed Electives: 4-6 cr. hrs.
Choose 1-3 courses from all courses in DASC, ANSC, AGBI, or FDSC except the following: Courses numbered lower than the 200 level; more than one evaluation or independent study course-DASC 210, 310, 490, ANSC 211, 311, 313, 490, FDSC 490.

Dance Education (DANC)
Department of Health and Human Performance
College of Education and Professional Studies

111 Karges Center Phone Number
(715) 425-3705 Web Site http://www.uwrf.edu/hhp/

Chair-Connie Foster, Debra Allyn, Betsy Barrett, Richard Bowen, Kevin Bullis, Gary Eloranta, Patti Ford, Steve Freeman, Tom Journell, Douglas Naylor, John O'Grady, Faye Perkins, Robert Ritzer, Susan Tarr, Jim Theis, Karla Zhe

The mission of the Department of Health and Human Performance is to provide leadership and education for a diverse student body in the areas of health, physical education, recreation, dance, and athletics. The Department is committed to promoting physical activity and healthy lifestyles throughout the lifespan, whether it be through providing opportunities for exceptional performance in athletics; for a holistic teaching approach in our physical education, health, dance, outdoor education and coaching curricula; for creative expression in Dance Theatre; or for recreational and leisure opportunities through activity courses and the Life Fitness Program.

Dance Education Minor: 22-24 Total Credits
Required Courses 22-24 cr. hrs.
DANC 100 History/Appreciation of Dance 3 cr. hrs.
DANC 107 Social Dance .5
DANC 110 Basic Jazz Dance .5
DANC 120 Fund. of Movement Through Dance 1 cr. hr.
DANC 150 Dance Improvisation 1 cr. hr.
DANC 221 Modern Dance II 1 cr. hr.
DANC 224 Ballet I 1 cr. hr.
DANC 226 Ballet II 1 cr. hr.
DANC 250 Dance Composition 2 cr. hrs.
DANC 257 Rhythms 2 cr. hrs.
DANC 260 Dance Repertory 1-3
Early Childhood Certification
Department of Teacher Education (TED)
College of Education and Professional Studies

257 Wyman Education Building
(715) 425-3230 Web Site: www.uwrf.edu/college-of-education/

Teri Crotty-Chair, Stephanie Harty, Tim Holleran, Angela Kaiser, Lee Karnowski, DeAn Krey, Mary Lundeberg, Florence Monsour, David Pepi, Margaret Phinney, Geoffrey Scheurman, José E. Vega, So-young Zeon

UW-River Falls offers elementary majors an early childhood minor which meets certification requirements to teach kindergarten and pre-kindergarten. In addition to providing further enrichment in techniques for instruction in the primary grades, this minor and certification increases the range of potential employment for an elementary education major. Those who may seek employment in existing day care centers, nursery schools, child and family education programs or those intending to start their own private pre-school should investigate the opportunities opened via an early childhood minor.

Early Childhood Certification Program
Prerequisites to entering the minor sequence:
TED 211 Educational Psychology: Elementary Education Completion of 30 credits
Required Courses: 23 cr. hrs.
TED 225 Developmental Learning Experiences of Young Children 3 cr. hrs
Prerequisite for all other Early Childhood courses
TED 335 Kindergarten Curriculum and Materials 3 cr. hrs.
TED 340 Pre-Kindergarten Curriculum 3 cr. hrs.
TED 410 Early Childhood Language Arts 3 cr. hrs.
TED 400 Supervision and Management Early Childhood Program 2 cr. hrs.
TED 405 Special Needs Child: Early Childhood Classroom 3 cr. hrs.
TED 330 Infant Toddler Development 3 cr. hrs.
TED 345 Parent Education and Family Development 3 cr. hrs.
Student Teaching Requirement: 10 cr. hrs.
TED 471 Student Teaching: Pre-kindergarten/Kindergarten (Co /Prerequisite TED 400)

Economics (ECON)
Department of Economics
College of Business and Economics

315 North Hall
(715) 425-3335
FAX: (715) 425-009
Web Site: http://www.uwrf.edu/sbe/

Brian Schultz-Chair, Jackie Brux, Janna Cowen, Hossein Eftekari, Pascal Ngoboka, Glenn Potts, Susan K. Rogers, Hamid Tabesh, John Walker
General Education Requirements as listed on pages 44-45.

Economics Major-Liberal Arts: 35 Total Credits
Option A: College of Arts and Sciences
Required Courses: 20 cr. hrs.
ECON 201 Principles of Microeconomics 3 cr. hrs.
ECON 202 Principles of Macroeconomics 3 cr. hrs.
ECON 205 Quantitative Analysis 3 cr. hrs.
ECON 301 Intermediate Microeconomics 3 cr. hrs.
ECON 302 Intermediate Macroeconomics 3 cr. hrs.
ECON 326 Statistical Methods for Economics and Business 3 cr. hrs.
ECON 480 Senior Seminar (writing intensive) 2 cr. hrs.
Elective Courses: 15 cr. hrs.
Economics courses 300 level or above
Required Supporting Course: 3 cr. hrs.
ECON 226 Introduction to Statistics 3 cr. hrs.
Option B: College of Business and Economics
Required Courses:
As listed for College of Arts and Sciences Option 20 cr. hrs.
Elective Courses:
As listed for College of Arts and Sciences Option 15 cr. hrs.
Required Supporting Courses: 6 cr. hrs.
ECON 226 Introduction to Statistics 3 cr. hrs.
MNGT 265 The Computer in Business 3 cr. hrs.

Economics Minor: 24 Total Credits
Liberal Arts Option
Required Courses: 15 cr. hrs.
ECON 201 Principles of Microeconomics 3 cr. hrs.
ECON 202 Principles of Macroeconomics 3 cr. hrs.
ECON 205 Quantitative Analysis 3 cr. hrs.
ECON 301 Intermediate Microeconomics 3 cr. hrs.
ECON 302 Intermediate Macroeconomics 3 cr. hrs.
Electives: Economics-300 level or above 9 cr. hrs.
Education Option Required Courses: 6 cr. hrs.
ECON 201 Principles of Microeconomics 3 cr. hrs.
ECON 202 Principles of Macroeconomics 3 cr. hrs.
Electives in Economics: 18 cr. hrs.
Choose from:
ECON 289 Special Topics: Economics 1-3
ECON 305 Money and Banking 3 cr. hrs.
ECON 312 Political Economics of Discrimination 3 cr. hrs.
ECON 324 Labor Economics 3 cr. hrs.
ECON 328 Domestic Topics in Third World Economic Development 3 cr. hrs.
ECON 329 International Topics in Third World Economic Development 3 cr. hrs.
ECON 332 Public Finance 3 cr. hrs.
ECON 334 Public Regulation 3 cr. hrs.
ECON 340 Contemporary International Trade Issues 3 cr. hrs.
ECON 342 International Finance 3 cr. hrs.
ECON 344 Comparative Economic Systems 3 cr. hrs.
ECON 362 History of Economic Thought 3 cr. hrs.
Elementary Education (TED)
Department of Teacher Education
College of Education and Professional Studies

257 Wyman Education Building
(715) 425-3230
Web Site: www.uwrf.edu/college-of-education/

Teri Crotty-Chair, Stephanie Harty, Tim Holleran, Angela Kaiser, Lee Karnowski, DeAn Krey, Mary Lundeberg, Florence Monsour, David Pepi, Margaret Phinney, Geoffrey Scheurman, José E. Vega, So-young Zeon

The four-year curriculum leading to the bachelor's degree in Elementary Education, designed to prepare teachers for elementary schools, grades 1-6, consists of a minimum of 132 semester hours that give students a broad general education, professional preparation for effective teaching at the elementary education level, and special preparation in an academic minor. Upon completion of these requirements, the elementary education major is certifiable for grades 1-6. Additional coursework is required for middle school (7-9) certification. Addition of the early childhood minor meets requirements for pre-k and kindergarten certification. Admission to Teacher Education is required the semester prior to enrolling in the Block sequence. See the college web page http://www.uwrf.edu/college-of-education/ for a complete list of requirements for admission and current admission deadline dates. Students spend three days per week for two semesters at public schools with innovative instructional programs. The techniques blocks involve two semesters of the junior year and includes the following courses: Block I: TED 310, 311, 312 12 cr. hrs. Block II: TED 315, 316, 317 12 cr. hrs.

General Education Requirements as listed on pages pages 47-48.

Elementary Education Major: 44 Total Credits
TED 211 Educational Psychology: Elementary Education (writing intensive) 5
TED 420 School and Society (writing intensive) 3 cr. hrs.
TED 310 Techniques in Elementary Education: Language Arts 4 cr. hr.
TED 311 Techniques in Elementary Education: Social Studies 4 cr. hr.
TED 312 Techniques in Elementary Education: Science 4 cr. hr.
TED 315 Techniques in Elementary Education: Mathematics 4 cr. hr.
TED 316 Developmental Reading 4 cr. hr.
TED 317 Reading Practicum 4 cr. hr.
TED 472 Student Teaching: Elementary Education 12 cr. hrs.

Required Courses: 15 cr. hrs.
TED 255 Reading Guidance for Children 3 cr. hrs.
or ENGL 250 Literature for Children
ART 250 Child Art 2 cr. hrs.
MUS 350 Music for Elementary Teachers 2 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.
HEAL 361 Methods and Materials in Health for the Elementary Teacher 3 cr. hrs.
P ED 326 Techniques in Physical Education for the Elementary School Teacher 2 cr. hrs.

Minor Areas: Elementary education majors must select a minor which meets two criteria: 1) it must be a certifiable curriculum area, and 2) it must be an important subject taught in elementary schools.
Minors recommended for the Elementary Education Major by the Wisconsin Department of Public Instruction include: Early Childhood Mathematics Speech Communication Health Education Modern Language Social Studies Language Arts/Reading Science
Other acceptable minors are: Anthropology Physics Economics Earth Science Geography English History Journalism Political Science Coaching/Athletics Psychology Dance Sociology Philosophy Biology Computer Science Chemistry Communication Disorders

English (ENGL)
Department of English
College of Arts and Sciences

245 Kleinpell Fine Arts Building
(715) 425-3537
Web Site: www.uwrf.edu/english/welcome.html


The Bachelor of Arts degree is offered in English or in Teaching English to Speakers of Other Languages (TESOL). The B.A. is a degree for the twenty-first century in its emphasis on broad learning, international studies, and the learning of languages. No minor is needed for this degree. The B.A. in English (Liberal Arts) prepares students to be broadly educated, culturally and historically, and skilled in thinking critically, researching, and writing. The degree prepares students for jobs in business, government and nonprofit organizations, journalism, and publishing. The B.A. in Teaching English to Speakers of Other Languages prepares students to teach English to non-native speakers in other countries or in private schools, businesses, or organizations here in the U.S. See page 173 for the program descriptions for TESOL.

The Bachelor of Science (Liberal Arts) degree is offered in English or in Teaching English to Speakers of Other Languages (TESOL). The B.S. is designed for those who wish to supplement their expertise in English with a second field of concentrated study: a minor. The B.S. in English (Liberal Arts) prepares students through their broad education and important general skills to enter various careers, and they choose minors that supplement their career goals. Some commonly chosen minors are history, film studies, journalism, professional writing, art, speech, and one of the modern languages. If a modern language is not chosen as a minor, a modern language course is strongly recommended as a liberal arts elective. The B.S. in Teaching English to Speakers of Other Languages (Liberal Arts) prepares students to teach English to non-native speakers in other countries or in private schools, businesses, or organizations here in the U.S. A minor in a modern language is one of the ideal complementary minors, but TESOL majors choose a variety of minors as well.

The Bachelor of Science (Education) degree is primarily intended to certify students to teach English in public high schools though the core skills it develops have broad application as well. The B.S. in English (Education) prepares students to teach literature, interpretive skills, writing, language, research, and critical thinking skills in high schools. Students must choose a minor. Minors in which students can obtain a s ECONd certification to teach in that subject are popular choices. Some of these minors include speech communication and theatre arts, a modern language, journalism, and history. The B.S. in Teaching English to Speakers of Other Languages (Education) prepares students to teach children who are non-native speakers of English in the public schools. Depending on the educational setting
in which the student intends to work, such a major can work well with any of the minors that are certifiable areas of study.

The Bachelor of Science in Broad Area English (Education) degree is designed to provide prospective high school teachers with additional areas of study that support their core English courses and that respond to the current demands of the teaching situations in modern secondary schools. No minor is required with this major; the Broad Area in effect replaces the minor.

General Education Requirements-Liberal Arts
B.A. and B.S. Liberal Arts Majors
General Education Requirements as listed on pages pages 34-35 with the following exceptions:

Humanities and Fine Arts: The General Education literature requirement is fulfilled by taking one of the following courses: ENGL 241, 242, 243, 244, or 245. English majors should not take another of these; only one will count toward graduation.

Social and Behavioral: TESOL majors and minors should include PSYC 101 among their three social science courses.

English Major - Liberal Arts: 36 Total Credits
Core Requirements: 12 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 335 Shakespeare 3 cr. hrs.

Required Courses: 12 cr. hrs.
ENGL 324 Survey of American Lit. I, Origins to 1900 (writing intensive) 3 cr. hrs.
ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive) 3 cr. hrs.
ENGL 331 Survey of British Lit. I, to 1800 (writing intensive) 3 cr. hrs.
ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive) 3 cr. hrs.

A second period course in British literature may replace one of the British survey courses, or a second period course in American literature may replace one of the American survey courses. At least three survey courses must be taken.

Directed Electives: 9 cr. hrs.
English Liberal Arts majors may double count courses in the General Education Humanities/Fine Arts "Other" group with those same courses which are applicable to this directed elective requirement. These double countable courses are: ENGL 203, 206, 207, 212, 214, 222, 231, 232, 233, 234, 235, 300, and 443.

Select one genre, sub-genre, or diversity literature course: 3 cr. hrs.
ENGL 202 Literature of Science Fiction 3 cr. hrs.
ENGL 203 Literature of the African-American Experience 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 207 Literature of the Asian-American Experience 3 cr. hrs.
ENGL 212 The Native American in Literature 3 cr. hrs.
ENGL 214 Women in Literature 3 cr. hrs.
ENGL 222 Literature of Fantasy 3 cr. hrs.
ENGL 226 Detective Fiction 3 cr. hrs.
ENGL 231 The Short Story 3 cr. hrs.
ENGL 232 Contemporary Drama 3 cr. hrs.
ENGL 233 Introduction to Poetry 3 cr. hrs.
ENGL 234 Modern Novels 3 cr. hrs.
ENGL 235 American Autobiography 3 cr. hrs.
ENGL 300 Women and Film 3 cr. hrs.
ENGL 343 The Novel and Film Adaptations 3 cr. hrs.
ENGL 443 American Ethnic Women Writers 3 cr. hrs.
Select one period course, English, American or International 3 cr. hrs. ENGL 341 European Literature (19th Century) 3 cr. hrs.
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
ENGL 429 American Renaissance 3 cr. hrs.
ENGL 430 American Realism 3 cr. hrs.
ENGL 431 Modern American Fiction 3 cr. hrs.
ENGL 432 Contemporary American Literature 3 cr. hrs.
ENGL 441 Twentieth-Century International Literature 3 cr. hrs.
Select one English course at the 300-/400 level 3 cr. hrs.
General Electives: 3 cr. hrs.

English Minor - Liberal Arts: 24 cr. hrs.
Core Requirements as listed for Major above 12 cr. hrs.
Required Courses: 6 cr. hrs.
ENGL 324 Survey of American Lit. I, Origins to 1900 (writing intensive) 3 cr. hrs.
or ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive)
ENGL 331 Survey of British Lit. I, to 1800 (writing intensive) 3 cr. hrs.
or ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive) or 3 cr. hrs
One survey course must cover the period before 1800.
Directed Electives: 6 cr. hrs.
English Liberal Arts minors may "double count" courses in the General Education Humanities/Fine Arts "Other" group with those same courses which are applicable to this directed elective requirement. These double countable courses are ENGL 231, 232, 233, and 234.
Select one genre course: 3 cr. hrs.
ENGL 231 The Short Story 3 cr. hrs.
ENGL 232 Contemporary Drama 3 cr. hrs.
ENGL 233 Introduction to Poetry 3 cr. hrs.
ENGL 234 Modern Novels 3 cr. hrs.
ENGL 343 The Novel and Film Adaptations 3 cr. hrs.
ENGL 344 Major Authors 3 cr. hrs.
Select one period course, English, American or International: 3 cr. hrs.
ENGL 341 European Literature (19th Century) 3 cr. hrs.
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
ENGL 429 American Renaissance 3 cr. hrs.
ENGL 430 American Realism 3 cr. hrs.
ENGL 431 Modern American Fiction 3 cr. hrs.
ENGL 432 Contemporary American Literature 3 cr. hrs.
ENGL 441 Twentieth-Century International Literature 3 cr. hrs

English Major- Education
General Education Requirements as listed on pages pages 47-48 with the following exceptions:
Humanities and Fine Arts: 9 cr. hrs.
ENGL 243 Types of Literature 3 cr. hrs.
SCTA 105 Introduction to Theatre and Drama. 3 cr. hrs.
Social and Behavioral Sciences: 9 cr. hrs.
In addition to POLS 114 and PSYC 101, choose one of the following courses, which also satisfies the cultural diversity requirement for certification: ENGL 203, 206, 207, 212, 214, 235, 385, or 443. Professional Courses: 31-39 cr. hrs.
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 AV Materials 1 cr. hr.
TED 212 Educational Psychology (writing intensive) 5
TED 420 School and Society (admission to teacher education required) 3 cr. hrs.
TED 422 Content Area Literacy in Middle and Secondary School 3 cr. hrs.
TED 432 Techniques of Middle/Secondary Education: English
Secondary certification in the major discipline only; for certification in the minor as well, techniques must be taken in that discipline for an additional 3 credits, for a total of 34. The 39 credits indicate middle school certification.
TED (473) 474 Student Teaching: (Middle Level) Secondary (6-) 12 cr. hrs.
PSYC 330 Exceptional Child 3 cr. hrs.
COUN 310 Counseling Skills for Teachers. Required for Middle School certification 2 cr. hrs.
TED 414 Development of the Transescent 3 cr. hrs.
TED 473 Student Teaching: Middle Level. Required for Middle School certification 6

Major Requirements: English-Education 39 cr. hrs.
Core Requirements: 12 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 335 Shakespeare 3 cr. hrs.
ENGL 335 Literature for Adolescents 3 cr. hrs.
ENGL 361 Composition Theory 3 cr. hrs.
ENGL 441 Twentieth-Century International Literature 3 cr. hrs.

A second period course in British literature may replace one of the British survey courses, or a second period course in American literature may replace one of the American survey.

Directed Electives:
Select one period course
English or American 3 cr. hrs.
ENGL 341 European Literature (19th Century) 3 cr. hrs.
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
ENGL 429 American Renaissance 3 cr. hrs.
ENGL 430 American Realism 3 cr. hrs.
ENGL 431 Modern American Fiction 3 cr. hrs.
ENGL 432 Contemporary American Literature 3 cr. hrs.

English Education Minor: 27 Total Credits
Core Requirements: 12 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 335 Shakespeare 3 cr. hrs.
Required Courses: 6 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 361 Composition Theory 3 cr. hrs.
Directed Electives: One survey course must cover the period before 1800. 6 cr. hrs. A. Select one survey course. 3 cr. hrs. ENGL 324 Survey of American Lit. I, Origins to 1900 (writing intensive) 3 cr. hrs.
or ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive) or 3 cr. hrs
B. Select one survey or period course. 3 cr. hrs. ENGL 331 Survey of British Lit. I, to 1800 (writing intensive) 3 cr. hrs.
or ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive)
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
Supporting Course: 3 cr. hrs.
ENGL 355 Literature for Adolescents 3 cr. hrs.

Broad Area English Education Major: 63 Total Credits
The Broad Area English Education Major consists of four groups of courses:
1. Core Requirements and Required Courses: 36 cr. hrs. ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive) 3 cr. hrs.
ENGL 335 Shakespeare 3 cr. hrs.
ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive) 3 cr. hrs.
ENGL 355 Literature for Adolescents 3 cr. hrs.
ENGL 361 Composition Theory 3 cr. hrs.
ENGL 441 Twentieth-Century International Literature 3 cr. hrs.

Students may choose between:
ENGL 324 Survey of American Lit. I, Origins to 1900 (writing intensive) 3 cr. hrs.
or ENGL 331 Survey of British Lit I, to 1800 (writing intensive) 3 cr. hrs.
Students who take ENGL 324 must choose one of the following period courses:
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
Students who take ENGL 331 must choose one of the following period courses:
ENGL 429 American Renaissance 3 cr. hrs.
ENGL 430 American Realism 3 cr. hrs.
ENGL 431 Modern American Fiction 3 cr. hrs.
ENGL 432 Contemporary American Literature 3 cr. hrs.
2. Areas of skills that correlate highly with current needs: 12 cr. hrs.
One reading pedagogy course: 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.
Select one of the following journalism courses: 3 cr. hrs.
JOUR 112 Writing for the Mass Media 3 cr. hrs.
JOUR 120 Radio and Television Field Production 3 cr. hrs.
JOUR 269 Feature Writing for Magazines and Newspapers 3 cr. hrs.
JOUR 360 Opinion Writing 3 cr. hrs.
Select one of the following speech or theater arts courses: 3 cr. hrs.
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 211 Public Speaking 3 cr. hrs.
SCTA 221 Acting II: Characterization 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
SCTA 335 Directing I 3 cr. hrs.
Select one of the following film studies courses: 3 cr. hrs.
SCTA 200 Introduction to Film Studies 3 cr. hrs.
SCTA 248 Film Cultures in Conflict 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 300 Women and Film 3 cr. hrs.
ENGL 301 History of Film 3 cr. hrs.
ENGL 343 The Novel and Film Adaptations 3 cr. hrs.
ENGL 448 Teaching of Film in the Secondary School 3 cr. hrs.
HIST 389 Topics in History (Film) 3 cr. hrs.

3. Selected areas of content necessary for a broadened perspective: 12 cr. hrs.
Choose two courses from either cultural area of special focus 6 cr. hrs.
World Culture, Select two to total 6 cr. hrs.: 
ART 211 Western Art to 1500 3 cr. hrs.
ART 212 Art History from 1500 3 cr. hrs.
ART 314 Art of China, India and Japan 2 cr. hrs.
ART 318 Latin American Art 2 cr. hrs.
HIST 321 The Middle Ages 3 cr. hrs.
HIST 322 The Renaissance 3 cr. hrs.
HIST 323 The Reformation 3 cr. hrs.
HIST 324 Absolutism, Enlightenment, and Revolution 3 cr. hrs.
HIST 327 World War I to World War II 3 cr. hrs.
HIST 328 World War II and the Cold War 3 cr. hrs.
HIST 330 Revolutions in Modern History 3 cr. hrs.
MUS 300 World Music 3 cr. hrs.
PHIL 221 Ancient Philosophy 3 cr. hrs.
PHIL 222 Hellenistic and Medieval Philosophy 3 cr. hrs.
PHIL 223 Origins of Modern Phil. From Bacon to Kant 3 cr. hrs.
PHIL 224 Existentialism and Late Modern Philosophy 3 cr. hrs.
PHIL 230 Logical Reasoning 3 cr. hrs.
PHIL 235 Philosophy of the Arts 3 cr. hrs.
HUM 255 Arts and Ideas I 4 cr. hr.
HUM 498 Senior Level Interdisciplinary Capstone Course in Humanities 2 or American Culture, Select two:
ART 311 American Art to 1865 3 cr. hrs.
ART 312 American Art since 1865 3 cr. hrs.
HIST 103 U. S. History to 1877 3 cr. hrs.
HIST 104 U. S. History Since 1865 3 cr. hrs.
HIST 205 Women's History: United States 3 cr. hrs.
HIST 206 Native Americans and the United States 3 cr. hrs.
HIST 207 African American History 3 cr. hrs.
HIST 369 American Intellectual History 3 cr. hrs.
MUS 200 American Music 3 cr. hrs.
SOCI 228 Native American Cultures 3 cr. hrs.
SCTA 230 Playwrights of Color 3 cr. hrs.
SCTA 339 American Theatre 3 cr. hrs.

and Select one of the following mass media or journalism courses: 3 cr. hrs.
Majors are encouraged to take JOUR 455 or PHIL 316.
JOUR 101 Introduction to Mass Communications 3 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
SCTA 353 Mass Media and Popular Culture 3 cr. hrs.
PHIL 316 Media Ethics 3 cr. hrs.

and Select one of the following speech or theater courses: 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.
SCTA 316 Organizational Communication 3 cr. hrs.
SCTA 319 Freedom to Speak 3 cr. hrs.
SCTA 407 Listening Instruction 3 cr. hrs.
SCTA 414 Speech in History 3 cr. hrs.

4. Choose a directed elective from one of the following: 3 cr. hrs.
Dramatic Literature, Choose from the following: 3 cr. hrs.
ENGL 232 Contemporary Drama 3 cr. hrs.
SCTA 337 History of Theatre and Dramatic Literature: Ancient Traditions through Renaissance Drama 3 cr. hrs.
SCTA 338 History of Theatre and Dramatic Literature: 18th Century to the Present 3 cr. hrs.
SCTA 339 American Theatre 3 cr. hrs.
or Film Studies 3 cr. hrs.
FILM 200-499; ENGL 300, 343, 448; JOUR 245, 302; GERM 315; SCTA 160, 248, 260, 448, and topics courses related to film.
or Writing Course 3 cr. hrs. ENGL 262, 266, 367, 368, 369, 370, 372, 373; JOUR 112, 113, 115, 230, 241, 245, 251, 252, 269, 360
or any Journalism Course 3 cr. hrs.
JOUR 101-499
or Humanities Course Choose from the following: 3 cr. hrs.
HUM 255 Arts and Ideas I 4 cr. hr.
HUM 256 Arts and Ideas II 4 cr. hr.

Environmental Science
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html


College of Agriculture, Food and Environmental Sciences:
General Education Requirements as listed on pages pages 26-27 with the following exceptions:
Social and Behavioral: ESM 105 required.
Sciences: GEOL 101, CHEM 111, 116, and BIOL 100 required.
College of Arts and Sciences:
General Education Requirements as listed on pages pages 34-35.

The environmental science major is designed to prepare students to face complex environmental challenges in the context of environmental quality management and sustainable development. Environmental science majors are prepared to monitor, model and manage environmental systems in the areas of environmental quality and risk evaluation, sampling and analysis, remediation and regulatory compliance. Graduates pursue careers in environmental consulting firms, regulatory agencies or corporations. Students with research interests are also prepared to pursue advanced degrees. The major is interdisciplinary within the College of Agriculture, Food and Environmental Sciences and the College of Arts and Sciences, and is administered by the Department of Plant and Earth Science. Departments contributing to the major include Agricultural Engineering Technology, Biology, Chemistry, Geography, Physics, and Plant and Earth Science. Required foundation courses are in the College of Agriculture, Food and Environmental Sciences OR the College of Arts and Sciences.

Foundation Courses in Agriculture 9-10 cr. hrs.
Select 3:
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGEN 150 Agricultural And Environmental Engineering Technology 3 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science or 3 cr. hrs.

College of Arts and Sciences Requirements:
SOCI 245 Environmental Sociology 3 cr. hrs.
PHIL 303 Environmental Ethics 3 cr. hrs.
ESM 307 Multicultural Perspectives on the Environment 3 cr. hrs.

Environmental Science Major
Environmental Science Core 18 cr. hrs.
GEOL102 Introductory Geology Lab 1 cr. hr.
ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
ESM 485 Seminar in Resource Management 1 cr. hr.
Choose one of the following:
ESM 303 Environmental Policies and Administration 3 cr. hrs.
BIOL 355 Environmental Law 3 cr. hrs.
POLS 355 Environmental Law 3 cr. hrs.
Choose one of the following:
MATH 226 Fundamentals of Statistics 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers 3 cr. hrs.

Required Supporting Courses: 29-30 cr. hrs.
MATH 166 Calculus 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
Choose one of the following two chemistry lecture/lab combinations: CHEM 231 Organic Chemistry I 3 cr. hrs.
and CHEM 236 Organic Chemistry Lab I 1 cr. hr.
or CHEM 251 Analytical Chemistry 2 cr. hrs.
and CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
Choose one of the following two physics series A. or B.:
A. PHYS 151 General Physics I 4 cr. hr.
PHYS 156 General Physics Lab I 1 cr. hr.
PHYS 152 General Physics II 4 cr. hr.
PHYS 157 General Physics Lab II 1 cr. hr.
B. PHYS 161 General Physics I 4 cr. hr.
PHYS 101 General Physics Lab I 1 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 102 General Physics Lab II 1 cr. hr.
BIOL 360 Ecology 3 cr. hrs.
Choose one of the following two courses:
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
Choose one of the following two courses:
BIOL 240 Cell and Molecular Biology
BIOL 324 Microbiology 3 cr. hrs.
Directed Electives: 18 cr. hrs.
A minimum of 6 credits in 400 level or greater. Courses taken as part of the supporting requirement cannot be double counted as directed electives. SOIL 311, 325, 350, 440, 460 3-4 cr. hr.
BIOL 210, 230, 240, 310, 324, 330, 344, 354, 360, 412, 413, 434, 444 3-4 GEOG 212, 250, 255, 316, 360, 368, 379, 412, 450, 460 3-12 cr. hrs.
CHEM 231 and 236, 232 and 237, 251 and 256, 356 1-3
AGEN 325, 365, 425,
GENG 450 3 cr. hrs.
GEOL 269, 327, 330, 445 2-4 cr. hr.
ESM 270, 333, 363, 370, 377, 413, 417 2-4 cr. hr.
AGEC450 3 cr. hrs.
Environmental Science Minor: 22 Total Credits
Required Courses: (ESM 105 is a prerequisite) 10 cr. hrs.
ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. hrs.
EMS 303 Environmental Policies and Administration 3 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
and GEOG 111 Laboratory for Physical Environments: Patterns and Systems 1 cr. hr.
or GEOL 101 Introductory Geology 3 cr. hrs.
and GEOL 102 Introductory Geology Lab 1 cr. hr.
Directed Electives: (6 credits at the 300 level or above) 12 cr. hrs.
ESM 109, 151, 307, 377, 490 3 cr. hrs.
ESM 300 or GEOG 300 3 cr. hrs.
GEOL 202, 269, 490 1-3 GEOG 330 or GEOG 300 2-3 GEOG 490, 499 1-3 BIOL/POLS 355 3 cr. hrs
PHIL 303 3 cr. hrs.
CHEM 200 3 cr. hrs.
SOCI 245 3 cr. hrs.
The Ethnic Studies minor is designed to allow students to study and focus their attention on the ethnic experiences in America. The courses included in the minor have been selected to focus the student's study as well as to allow for individual flexibility. It is possible for Arts and Sciences majors to double minor in Ethnic Studies and Women's Studies with minimal additional credits. The double minor is flexible enough for students to graduate on time while supporting virtually any major. By choosing the Women's Studies/Ethnic Studies double minor, students also fulfill six hours of the Arts and Sciences Liberal Arts requirements as well as the three-hour cultural diversity requirement. See the program listing for Ethnic Studies.

Ethnic Studies Minor: 24 Total Credits
Required Courses: 6 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
ETHN 480 Seminar: Ethnicity and Gender 3 cr. hrs.
Directed Electives: Electives in American Ethnicity 6 cr. hrs.
ECON 312 Political Economy of Discrimination 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 235 American Autobiography 3 cr. hrs.
ENGL 443 American Ethnic Women Writers 3 cr. hrs.
HIST 204 U.S. Immigration and Ethnic History 3 cr. hrs.
PHIL 245 Islamic and Oriental Religions in the U.S. 3 cr. hrs.
POLS 212 The Politics of Equality and Inequality in the United States 3 cr. hrs.
PSYC 285 Psychology of Prejudice and Racism 3 cr. hrs.
SCTA 230 Playwrites of Color 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SOCI 225 Sociology of Race and Ethnicity 3 cr. hrs.
TED 252 Foundations of Multicultural Education 3 cr. hrs.
Directed Electives: Electives in Specific Ethnic Groups 9 cr. hrs.
ANTH 228 Native American Cultures 3 cr. hrs.
ENGL 203 Literature of the African American Experience 3 cr. hrs.
ENGL 207 Literature of the Asian American Experience 3 cr. hrs.
ENGL 212 The Native American in Literature 3 cr. hrs.
ETHN 270 Puerto Rican Society 3 cr. hrs.
HIST 206 Native Americans and the United States 3 cr. hrs.
HIST 207 African-American History 3 cr. hrs.
MUS 255 History of Jazz 3 cr. hrs.
Directed Electives: Supporting Courses 3 cr. hrs.
Courses Relating to an Ethnic Heritage
ART 318 Latin American Art 2 cr. hrs.
GEOG 342 Latin America 3 cr. hrs.
GEOG 343 Africa 3 cr. hrs.
HIST 201 Introduction to Asian Civilization 3 cr. hrs.
HIST 202 Introduction to Latin American Civilizations 3 cr. hrs.
POLS 348 Politics of East Asia 3 cr. hrs.
Courses Relevant to the American Ethnic Experience
GEOG 237 Poverty in the United States 3 cr. hrs.
WMST 200 Introduction to Women’s Studies 3 cr. hrs.
ESM 307 Multicultural Perspectives on the Environment 3 cr. hrs.

Double Minor: Ethnic Studies & Women's Studies See the program listing on page 176.

Farm Management
Department of Agricultural Economics (AGEC)
College of Agriculture, Food and Environmental Sciences

103 Agriculture Science Hall
(715) 425-3298
Web Site: www.uwrf.edu/ag-Economics/

Nate Splett-Chair, Lewis May, Stanley Schraufnagel, James Shatava, Larry Swain, David Trechter.

Farm Management Minor: 24 Total Credits

Required courses:
AGEC230 Agricultural Economics I 3 cr. hrs.
AGEC240 Cooperatives 3 cr. hrs.
AGEC305 Agricultural Business Accounting 3 cr. hrs.
AGEC355 Agricultural Markets and Prices (writing intensive) 3 cr. hrs.
AGEC360 Farm Management 3 cr. hrs.
AGEC365 Agricultural Finance 3 cr. hrs.
AGEC456 Commodity Marketing 3 cr. hrs.
AGEC440 Agricultural Policy I (writing intensive) 3 cr. hrs.

Film Studies (FILM) Interdisciplinary

257 Kleinpell Fine Arts
(715) 425-3354
Web Site http://www.uwrf.edu/film-studies-minor/

Carole Gerster-Coordinator

Film Studies is an interdisciplinary minor offered by four departments: English, History, Journalism, and Speech Communication and Theatre Arts. Film Studies examines film as an art form, as an industry, and as the most popular and most influential communication medium of the twentieth century. Film Studies provides an interdisciplinary approach to visual literacy as it introduces students to film history, theory, criticism, and production.

Film Studies Minor: 23-24 Total Credits

Required Courses: 8-9 cr. hrs.
FILM 200 Introduction to Film Studies 3 cr. hrs.
or SCTA 200 Introduction to Film Studies
Choose one course from the following:
FILM/ENGL/HIST/JOUR/SCTA 301 History of Film 3 cr. hrs.
FILM 499 Directed Project in Film 2-3 cr. hrs.
Criticism Electives: 6-9 cr. hrs.
FILM 206 Ethnic Film and Literature 3 cr. hrs.
FILM 248 Cultures in Conflict 3 cr. hrs.
FILM 300 Women and Film 3 cr. hrs.
FILM 302 History of Documentary 3 cr. hrs.
FILM 343 The Novel and Film Adaptations 3 cr. hrs.
Directed Electives: 6-9 cr. hrs.
FILM 160 TV Studio Production 3 cr. hrs.
FILM 232 Makeup for Theatre, Film, and Video 3 cr. hrs.
FILM 245 Writing for Film and Television 3 cr. hrs.
FILM 260 Electronic Field Production 3 cr. hrs.
FILM 261 Electronic Media Copy Writing 3 cr. hrs.
FILM 289 Special Topics: Film (Co-listed with ENGL and MODL, which offer individual courses)
FILM 315 German Classic and Modern Film 3 cr. hrs.
FILM 360 Corporate Electronic Communication 3 cr. hrs.
FILM 389 Special Topics (Co-listed with HIST, JOUR, MUS, SCTA, SOCI, which offer individual courses)
FILM 448 Teaching Film in the Secondary School 3 cr. hrs.

Food Science and Technology (FDSC)
Department of Animal and Food Science
College of Agriculture, Food and Environmental Sciences

247 Agriculture Science Hall
(715) 425-3704
Web Site http://www.uwrf.edu/animal-science/welcome.html

Anthony Jilek-Chair, Larry Baumann, Perry Clark, Dennis Cooper, Philip George, Thomas Goerke, Lawrence Kasten, Steven Kelm, Ranee May, Peter Rayne, Stephen Ridley, Purnendu C. Vasavada, Bonnie Walters, Steve Watters

General Education Requirements as listed on pages pages 26-27 with the following exceptions:
Sciences Required Courses:
CHEM 111 CHEM 116 BIOL 150 PHYS 151 or 161
Mathematics Required Courses: MATH 147 or 166

Foundation Courses in Agriculture: 12 cr. hrs.
FDSC 112 Intro to Food Science 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
AGEN 352 Food Engineering 3 cr. hrs.
AGEC230 Agriculture Economics I 3 cr. hrs.

Food Science and Technology Major: 43-47 Total Credits
Required Courses: 29 cr. hrs.
FDSC 113 Intro Food Science Lab 1 cr. hr.
FDSC 140 Meat and Meat Products
or FDSC 202 Dairy Manufacturing I-required for Dairy Tech Option
or FDSC 259 Cereal Technology 3 cr. hrs.
FDSC 285 Seminar in Food Science 1 cr. hr.
FDSC 310 Food Processing 4 cr. hr.
FDSC 313 Food Processing Lab 1 cr. hr.
FDSC 320 Food Quality Assurance 2 cr. hrs.
FDSC 335 Food Microbiology 4 cr. hr.
FDSC 360 Food Chemistry 3 cr. hrs.
FDSC 385 Seminar in Food Science 1 cr. hr.
FDSC 422 Product Development and Sensory Evaluation 4 cr. hr.
FDSC 461 Food Analysis 4 cr. hr.
FDSC 485 Seminar in Food Science 1 cr. hr.
Required Supporting Courses: 19 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 117 General Chemistry Lab 1 cr. hr.
CHEM 230 General Organic Chemistry
or CHEM 231 Organic Chemistry I 3 cr. hrs.
AGBI 251 Agricultural Biochemistry
or CHEM 361 Biochemistry 3 cr. hrs.
AGBI 252 Agricultural Biochemistry Laboratory Techniques 1 cr. hr.
BIOL 324 Bacteriology 4 cr. hr.
ANSC 341 Biometrics 3 cr. hrs.
FDSC 270 Internship 2-4 cr. hr.
Select Industry, Dairy Technology, or Science Option below: Industry Option 14-16 cr. hrs
ACCT231 Principles in Accounting I 3 cr. hrs.
Select two from: FINC 345 Managerial Finance or
AGEC365 Agricultural Finance 3 cr. hrs.
MNGT 300 Principles of Management or
AGEC468 Agribusiness Firm Management 3 cr. hrs.
MKTG 310 Principles of Marketing or
AGEC355 Agricultural Markets and Prices 3 cr. hrs.
Electives (choose any Food Science Courses) 5-7
Dairy Technology Option 14-18 cr. hrs.
FDSC 302 Dairy Manufacturing II 3 cr. hrs.
FDSC 469 Dairy Plant Management 2 cr. hrs.
FDSC 470 Dairy Plant Management Lab 1 cr. hr.
AGEC355 Agricultural Markets and Prices 3 cr. hrs.
AGEC468 Agribusiness Firm Management 3 cr. hrs.
Electives (choose any Food Science Courses) 2-4 cr. hr.
Science Option - IFT Approved Curriculum 14-16 cr. hrs.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
MATH 167 Calculus II 4 Electives (choose any Food Science Courses) 5-7
Food Science Minor: 23 Total Credits
Required Courses: 17 cr. hrs.
FDSC 112 Intro to Food Science 3 cr. hrs.
FDSC 113 Intro Food Science Lab 1 cr. hr.
FDSC 312 Food Processing 4 cr. hr.
FDSC 313 Food Processing Lab 1 cr. hr.
FDSC 335 Food Microbiology 4 cr. hr.
BIOL 324 Bacteriology 4 cr. hr.
Select from: 6 cr. hrs.
FDSC 140 Meat and Meat Products 3 cr. hrs.
FDSC 202 Dairy Manufacturing I 3 cr. hrs.
FDSC 240 Meat Product Processing 3 cr. hrs.
Geography is a wide-ranging discipline which asks two questions: "Where are things located?", but even more important, "Why are they located where they are?" While the answer to the former is largely descriptive, the answer to the latter is based on analysis of data. The modern geographer uses data from many sources to assess the constantly changing physical and human landscapes of the earth's surface from local to global scales. Mapping and analyzing these physical and cultural patterns with the aid of Geographic Information Systems (GIS) involve geographers in many types of decision making. The geography major allows students to relate their studies in the humanities and social sciences to their work in the natural sciences. The geography curriculum can be tailored to those who have broad interdisciplinary interests and to those who have a focused interest in one of the geography subfields: human geography, physical geography or Geographic Information Systems (GIS) and cartography. In addition to the geography major and minor, the department offers a GIS/Cartography minor. Coursework prepares students for careers in GIS applications and digital map production. The department offers various courses in cartographic theory, GIS, and map design. All GIS and cartography courses are computer based.

General Education Requirements: BA and BS Liberal Arts majors as listed on pages 34-35. BS Education majors as listed on pages 47-48.

Geography Major - Liberal Arts: 36 Total Credits
(without a Cartography Minor)
Required Courses: 18 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GEOG 401 Senior Colloquium in Geography 2 cr. hrs.
Directed Electives 6 cr. hrs.
Choose 3 credits from the following:
GEOG 241 Wisconsin 3 cr. hrs.
GEOG 242 Canada 3 cr. hrs.
GEOG 340 Europe 3 cr. hrs.
GEOG 342 Latin America 3 cr. hrs.
GEOG 343 Africa 3 cr. hrs.
GEOG 344 Asia and Oceania 3 cr. hrs.
Choose 3 credits from the following:
GEOG 212 Weather and Climate 3 cr. hrs.
GEOG 213 Landforms of North America 3 cr. hrs.
GEOG 214 World Patterns of Plants and Animals 3 cr. hrs.
GEOG 220 Economic Geography 3 cr. hrs.
GEOG 225 Geography of Wine 1 cr. hr.
GEOG 235 The American Landscape 3 cr. hrs.
GEOG 237 Poverty in the United States 3 cr. hrs.
GEOG 255 Cartography II 3 cr. hrs.
GEOG 316 The Physical Environment of Urban Areas 3 cr. hrs.
GEOG 322 Urban Geography 3 cr. hrs.
GEOG 324 Historical Geography of the United States 3 cr. hrs.
GEOG 335 The American Environment: Perceptions and Policies 3 cr. hrs.
GEOG 360 Introduction to Geographic Information Systems 3 cr. hrs.
GEOG 368 Geoprocessing Techniques 3 cr. hrsc.
GEOG 378 Semester Abroad 3-6 cr. hrs.
GEOG 379 Geography Internship 3-12 cr. hrs.
GEOG 385 Interdisciplinary Seminar on the American Frontier 3 cr. hrs.
GEOG 389 Topics in Geography .5-3 cr. hrs.
GEOG 412 Advanced Climatology 3 cr. hrs.
GEOG 450 Advanced Map Design and Production 3 cr. hrs.
GEOG 460 Advanced Geographic Information Systems 3 cr. hrs.
GEOG 490 Readings in Geography 1-3 cr. hrs.
GEOG 499 Independent Study 1-2 cr. hrs.
Electives: 12 cr. hrs.
Must be numbered 200 and above, see courses listed in Directed Electives.

Geography Major - Liberal Arts with Cartography Minor
Major Requirements 36 Total Credits
Required Courses: 15 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GEOG 401 Senior Colloquium in Geography 2 cr. hrs.
Directed Electives: (See Geography Major without a Cartography Minor) 6 cr. hrs.
Electives: (See Geography Major without a Cartography Minor) 15 cr. hrs.

Geography Minor - Liberal Arts: 22 Total Credits
Required Courses: 13 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
Electives: 9 cr. hrs.
(Courses numbered 200 and above)

Geography Minor - Elementary and Secondary Education: 22 Total Credits
Required Courses: 16 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 241 Wisconsin 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
General Electives: 6 cr. hrs.
(Courses numbered 200 and above)

GIS/Cartography Minor: 21 Total Credits
(with a Geography Major)
Required Courses: 12 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 255 Cartography II 3 cr. hrs.
GEOG 360 Introduction to GIS 3 cr. hrs.
GEOG 368 Geoprocessing Techniques 3 cr. hrs.
Directed Electives: 9 cr. hrs.
GROUP A: Choose 6 or 9 credits from the following:
GEOG 450 Advanced Map Design and Production 3 cr. hrs.
GEOG 460 Advanced GIS 3 cr. hrs.
GEOG 379 Geography Internship 3-12 cr. hrs.
GROUP B: If 6 credits were chosen from Group A, then choose 3 credits from the following:
GENG 235 Surveying 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 363 GIS Applications in Resource Management 3 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.

Cartography Minor 21 Total Credits
(without a Geography Major)
Required Courses: 12 cr. hrs.
(See Cartography Minor with a Geography Major)
Directed Electives: 9 cr. hrs.
GROUP A: (See Cartography Minor with a Geography Major Group A)
GROUP B: If 6 credits were chosen from Group A, then choose 3 credits from the following:
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GENG 235 Surveying 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 363 GIS Applications in Resource Management 3 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.

Geography-Broad Field Social Studies

The Broad Field Social Studies (BFSS) degree is the preferred degree for secondary teaching in the area of social studies. This degree offers many options and great versatility. The program requires that the student have a concentration (a major) in one of the social sciences and then additional work in the other social sciences. The concentration gives the degree maximum flexibility if the student does not continue in the field of education.
General Education Requirements as listed on pages pages 34-35 with the following exceptions:

Social and Behavioral Science:
POLS 114 American, National, State and Local Government
PSYC 101 General Psychology
TED 252 Foundations of Multicultural Education
ESM/GEOL 300 Environmental Education

Professional Secondary Education Requirements. See page 161. 37 Total Credits

Geography Emphasis: 66 Total Credits
Required Courses: 18 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GEOG 401 Senior Colloquium in Geography 2 cr. hrs.
Directed Electives:
(See Geography Major without a Cartography Minor) 6 cr. hrs.
Electives:
(See Geography Major without a Cartography Minor) 12 cr. hrs.
Distribution: 30 cr. hrs.
Select 30 credits from at least two of the following: Anthropology, Economics, History, Political
Science, Psychology, Sociology 9 credits from each of two of the above areas 18 3 credits from
each of four of the above areas 12 cr. hrs.

Broad Field Social Science Minor
For the Social Science minor requirements refer to page 162.

Geology (GEOL)
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html

Robert W. Baker-Chair, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove,
Michael Crotser, Terry L. Ferriss, Michael C. Kaltenberg, Kerry L. Keen, N. Larry Meyers, Michael D.
Middleton, Lanny Neel, Eric M. Sanden, Brian R. Smith, Roger A. Swanson, Donovan H. Taylor, Laine
Vignona, Ian S. Williams

General Education Requirements as listed on pages pages 26-27 with the following exceptions:
Sciences: BIOL 100, GEOL 101, and CHEM 111,116

Geology Major
Required Geology Courses: 37-38 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 150 Historical Geology 4 cr. hr.
GEOL 230 Mineralogy 4 cr. hr.
GEOL 231 Petrology 4 cr. hr.
GEOL 285 Sophomore Seminar in Geology (writing intensive) 1 cr. hr.
GEOL 326 Structural Geology 4 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hr.
GEOL 362 Stratigraphy and Sedimentation 4 cr. hr.
GEOL 371-376 Any one of the Field Geology Courses 1-2 cr. hrs.
GEOL 441 Geophysics 4 cr. hr.
GEOL 450 Paleontology (writing intensive) 5
GEOL 485 Senior Research Experience (writing intensive) 1 cr. hr.
Required Professional Courses: 19 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
and CHEM 117 General Chemistry Lab II 1 cr. hr.
MATH 166 Calculus I 4 cr. hr.
Choose either sequence A or B below:
A. PHYS 151 General Physics I 4 cr. hr.
   PHYS 152 General Physics II 4 cr. hr.
   PHYS 156 General Physics Laboratory I 1 cr. hr.
   PHYS 157 General Physics Laboratory II 1 cr. hr.
B. PHYS 101 General Physics Laboratory I 1 cr. hr.
   PHYS 102 General Physics Laboratory II 1 cr. hr.
   PHYS 161 General Physics I 4 cr. hr.
   PHYS 162 General Physics II 4 cr. hr.
Directed Electives:
(consult with your advisor for these or other selections) 20 cr. hrs.
AGRN 451 Integrated Pest Management 3 cr. hrs.
AGRN 462 Agricultural Ecology 2 cr. hrs.
BIOL Any 210 level or higher
CHEM Any 230 level or higher
CPTS Any computer systems course
ENGL 367 Technical Writing 3 cr. hrs.
ESM Any ESM course 150 or higher, except 300, and 343
GENG Any general engineering course
GEOG 250 Cartography I 3 cr. hrs.
GEOG 255 Cartography II 3 cr. hrs.
GEOG 360 Introduction to Geographic Information Systems 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers 3 cr. hrs.
GEOG 368 Geoprocessing Techniques 3 cr. hrs.
GEOG 412 Advanced Climatology 3 cr. hrs.
GEOG 450 Advanced Map Design and Production 3 cr. hrs.
GEOG 460 Advanced Geographic Information Systems 3 cr. hrs.
GEOL 270 Internship I 2-4 cr. hr.
GEOL 370 Internship II 2-4 cr. hr.
GEOL 445 Hydrogeology 3 cr. hrs.
GEOL 490 Independent Study in Geology 1-3
MATH Any math class 167 or higher
PHYS Any physics class 204 or higher
SOIL 210 Introductory Soil Science 3 cr. hrs.
SOIL 325 Hydric Soils and Wetland Environments 3 cr. hrs.
SOIL 350 Pedology 4 cr. hr.
SOIL 440 Soil and Water Conservation 4 cr. hr.
SOIL 460 Soil Physics 3 cr. hrs.

Emphases
An emphasis is not a minor but is a suggested series of courses taken as directed electives that fit together well, fit well with the geology major and that would help a career in the designated area. Consult with geology faculty for more information.

Environmental/Engineering: GENG 235, 236, 265, SOIL 460, MATH 167
Environmental/Hydrogeology: See Hydrogeology Minor
Graduate School: MATH 167, ENGL 367, CPTS 105, Field Geology, GEOL 490
Mineral Exploration: ESM 333, GEOG 250, 260, CHEM 251, 256, Field Geology, GEOL 490
Ocean Sciences: CPTS 105, BIOL 230, 434, MATH 167, CHEM 251, 256, PHYS 311, GEOL 202 cr. hrs.
Paleontology: MATH 167, CPTS 105, Field Geology, BIOL 230, GEOL 490, Additional courses in Biology
Petroleum Geology: GEOL 445, Field Geol., BIOL 324, 355, CHEM 231, 232, GENG 236, 368, GEOL 490 This sequence of courses will provide Teacher Certification in Earth Science in grades 6-12. The following courses are required. MATH 146 should be taken. Consult with Geology faculty for changes.

Earth Science Certification Option - Secondary Education
General Education for Secondary Education Majors (see page 195) Professional Courses 36-39 cr. hrs.
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 212 Educational Psychology: Middle and Secondary Education 5 cr. hr.
TED 414 Development of the Transescent (writing intensive) 3 cr. hrs.
TED 420 School and Society 3 cr. hrs.
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
TED 423 Writing, Speaking and Listening in the Content Area 3 cr. hrs.
TED 434 Techniques of Middle/Secondary Education: Science 3 cr. hrs.
TED 473 Student Teaching: Middle Level 1-6 cr. hrs.
TED 474 Student Teaching: Secondary 1-12 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.
COUN 310 Counseling Skills for Teachers 2 cr. hrs.
or COUN 410 Introduction to Counseling 3 cr. hrs.

Earth Science Courses 42 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 150 Historical Geology 4 cr. hr.
GEOL 202 Oceanography 2 cr. hrs.
GEOL 230 Mineralogy 4 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hr.
GEOL 305 Geology of the Planets 2 cr. hrs.
GEOL 330 Meteorology 2 cr. hrs.
GEOL 450 Paleontology (writing intensive) 4 cr. hr.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
PHYS 117 Introductory Astronomy 3 cr. hrs.
PHYS 151 General Physics I 4 cr. hr.
PHYS 156 General Physics Laboratory I 1 cr. hr.
BIOL 100 Introduction to Biology 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
Geology Minor: 21 Total Credits  
Required Courses 13 cr. hrs.  
GEOL 102 Introductory Geology Lab 1 cr. hr.  
GEOL 150 Historical Geology 4 cr. hr.  
GEOL 230 Mineralogy 4 cr. hr.  
GEOL 231 Petrology 4 cr. hr.  
Electives in Geology 8 cr. hrs.  
Select from 300 or 400 level Geology courses except GEOL 330

Health and Human Performance  
College of Education and Professional Studies

111 Karges Center  
(715) 425-3705  
Web Site http://www.uwrf.edu/hhp/

Chair-Connie Foster (Director), Faye Perkins (Assistant Director), Debra Allyn, Betsy Barrett, Richard Bowen, Kevin Bullis, Gary Eloranta, Patti Ford, Steve Freeman, Tom Journell, Douglas Naylor, John O'Grady, Robert Ritzer, Susan Tarr, Jim Theis, Karla Zhe

The mission of the Department of Health and Human Performance is to provide leadership and education for a diverse student body in the areas of health, physical education, recreation, dance, and athletics. The Department is committed to promoting physical activity and healthy lifestyles throughout the lifespan, whether it be through providing opportunities for exceptional performance in athletics; for a holistic teaching approach in our physical education, health, dance, outdoor education and coaching curriculae; for creative expression in Dance Theatre; or for recreational and leisure opportunities through activity courses and the Life Fitness Program. The Health and Human Performance Major provides students with three options: Option I: Comprehensive K-12 Physical Education (teacher certification; no minor required) Option II: Health and Human Performance Studies (non-certifiable option; minor required) Option III: Health Education (teacher certification; minor required) Students from all disciplines are encouraged to enjoy the opportunities provided through minors in Health Education, Coaching, Dance Education, or Outdoor Education.

General Education Requirements as listed on pages pages 47-48.

Health and Human Performance Major  
Option I: Comprehensive K-12 Physical Education (teacher certifiable) 54 Total Credits Required Courses: 22 cr. hrs.  
HEAL 263 Human Anatomy 3 cr. hrs.  
HEAL 366 Exercise Physiology 4 cr. hr.  
P ED 161 Intro. to Health and Human Performance 2 cr. hrs.  
P ED 354 Biomechanics 3 cr. hrs.  
P ED 360 Tests and Measurements in Physical Education 2 cr. hrs.  
P ED 450 Organization and Administration of Physical Education 2 cr. hrs.  
P ED 452 History and Philosophy of Physical Education and Sport 3 cr. hrs.  
SFED 200 First Aid and Basic Life Support 3 cr. hrs.  
K-12 Focus Courses: 29 credits  
P ED 201 Outdoor Educ Concepts and Skills-Summer Activities 3 cr. hrs.  
P ED 241 Motor Learning 2 cr. hrs.  
P ED 251 Field Sports 2 cr. hrs.  
P ED 252 Racquet Sports 2 cr. hrs.
P ED 253 Lifetime Sports 2 cr. hrs.
P ED 254 Individual Sports 2 cr. hrs.
P ED 258 Team Sports 2 cr. hrs.
P ED 300 Adapted Physical Education 2 cr. hrs.
P ED 361 Perceptual Motor Foundations and Sport Skill Development 4 cr. hr.
P ED 435 Curriculum: Physical Education K-12 3 cr. hrs.
DANC 120 Fundamentals of Movement Through Dance 1 cr. hr.
DANC 257 Rhythms 2 DANC 362 Dance for the Elementary School 2 Directed Electives: 3 cr. hrs.
DANC 224 Ballet I 11 cr. hr.
P ED 147 Water Safety Instructor 2 cr. hrs.
P ED 149 Gymnastics II 1 cr. hr.
P ED 255 Techniques in Sport Fishing 1 cr. hr.
P ED 268 Beginning Football 1 cr. hr.
P ED 465 Scientific Principles of Conditioning 2 cr. hrs.
P ED 301 Foundations of Outdoor Leadership 3 cr. hrs.
or ESM 301 Foundations of Outdoor Leadership

Professional Courses: 31 cr. hrs.
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 211 or 212 Educational Psychology Elem. or Secondary 5
TED 420 School and Society 3 cr. hrs.
TED 422 Content Area Literacy in Middle/Secondary School 3 cr. hrs.
TED 435 Techniques of Middle/Secondary Edu: Physical Ed. 3 cr. hrs.
TED 475 Student Teaching: K-12 12 PSYC 330 The Exceptional Child 3 cr. hrs.

Option II: Health and Human Performance Studies, minor required (non-certifiable) 34 Total Credits
Requirements: 27 cr. hrs.
HEAL 263 Human Anatomy 3 cr. hrs.
HEAL 366 Exercise Physiology 4 cr. hr.
P ED 161 Intro to Health and Human Performance 2 cr. hrs.
P ED 201 Outdoor Education Concepts and Skills-Summer Activities 3 cr. hrs.
P ED 354 Biomechanics 3 cr. hrs.
P ED 360 Test and Measurement in Physical Education 2 cr. hrs.
P ED 450 Organization and Administration of Physical Education and Athletics 2 cr. hrs.
P ED 452 History and Philosophy of Physical Education and Sport 3 cr. hrs.
P ED 465 Scientific Principles of Conditioning 2 cr. hrs.
SFED 200 First Aid and Basic Life Support 3 cr. hrs.
Directed Electives: 7 cr. hrs.
Choose 3 credits from A and 4 credits from B below.
A. Select 3 credits from the following:
DANC 107 Social Dance 1 cr. hr.
DANC 257 Rhythms 2 cr. hrs.
P ED 105 Backpacking/Wilderness Awareness 1 cr. hr.
P ED 106 Canoeing 1 cr. hr.
P ED 251 Field Sports 2 cr. hrs.
P ED 252 Racquet Sports 2 cr. hrs.
P ED 253 Lifetime Sports 2 cr. hrs.
P ED 254 Individual Sports 2 cr. hrs.
P ED 255 Techniques in Sport Fishing 1 cr. hr.
P ED 258 Team Sports 2 cr. hrs.
B. Select 4 credits from the following:
HEAL 269 Wellness 3 cr. hrs.
HEAL 315 Nutrition 3 cr. hrs.
P ED 213 Care and Prevention of Athletic Injury 2 cr. hrs.
P ED 241 Motor Learning 2 cr. hrs.
P ED 270 Athletic Training Practicum 2 cr. hrs.
P ED 300 Adapted Physical Education 2 cr. hrs.
ESM 300 Environmental Education 3 cr. hrs.
or P ED 301 Foundations of Outdoor Leadership or 3 cr. hrs.
P ED 371 Recreation Field Study 1-4 cr. hr.
P ED 380 Biomechanics/Kinesiology Seminar 2 cr. hrs.
P ED 460 Beginning Techniques in Lab Research 1 cr. hr.
SOCI 230 Sociology of Sport and Leisure 3 cr. hrs.

Professional courses 14 cr. hrs.
PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. hrs.
PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. hrs.
CPTS 105 Microcomputer Applications 2

Option III: Health Education, minor required (teacher certification) 68 Total Credits
Requirements:
34 cr. hrs.
P ED 161 Introduction to Health and Human Performance 2 cr. hrs.
SFED 200 First Aid and Basic Life Support 3 cr. hrs.
SFED 330 Safety in Home, School and Community: Promotion and Planning 2
SOWK 250 Use, Abuse, and Addiction 3 cr. hrs.
HEAL 263 Human Anatomy 3 cr. hrs.
HEAL 269 Wellness 3 cr. hrs.
HEAL 315 Nutrition 3 cr. hrs.
HEAL 350 Community Health 3 cr. hrs.
HEAL 366 Exercise Physiology 4 cr. hr.
HEAL 460 Teaching of Family Life and Sexuality Education 3 cr. hrs.
HEAL 465 Comprehensive School Health Education Programs 3 cr. hrs.
COUN 310 Counseling Skills for Teachers 2 cr. hrs.
Required Supporting Course: 3 cr. hrs.
GEOG/ESM 300 Environmental Education 3 cr. hrs.
Professional Education Requirements: 34 cr. hrs.
PSYC 330 Exceptional Child 3 cr. hrs.
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 212 Educational Psychology: Middle and Secondary Education 5
TED 420 School and Society 3 cr. hrs.
TED 422 Content Area Literacy in Middle/Secondary School 3 cr. hrs.
TED 423 Writing, Speaking and Listening in the Content Area 3 cr. hrs.
TED 429 Techniques of Secondary Education: Health Education 3 cr. hrs.
TED 473 Student Teaching: Middle Level 6
TED 474 Student Teaching: Secondary 6

Health Education Minor: 23 Total Credits
Required Courses: 23 cr. hrs.
HEAL 262 Human Anatomy and Physiology (or HEAL 263 & 366) 3 cr. hr.
HEAL 269 Wellness 3 cr. hrs.
HEAL 315 Nutrition 3 cr. hrs.
HEAL 460 Teaching of Family Life and Sexuality Education 3 cr. hrs.
HEAL 465 Comprehensive School Health Education 3 cr. hrs.
SFED 200 First Aid and Basic Life 3 cr. hrs.
SPSY 310 Counseling for the Teacher 2 cr. hrs.
SOWK 250 Use, Abuse and Addiction 3 cr. hrs.
Required supporting course (choose one of the following):
GEOG/ESM 300 Environmental Education 3 cr. hrs.
Other professional courses and student teaching required for certification:
TED 429 Techniques of Secondary Education: Health Education 3 cr. hrs.
TED 473/474 Student Teaching 12 cr. hrs.
TED 414 Development of the Transescent-Required for Minnesota licensure 3 cr. hrs.

History (HIST)
Department of History and Philosophy
College of Arts and Sciences

355 Kleinpell Fine Arts Building
(715) 425-3164
Web Site http://www.uwrf.edu/history

History: John Buschen-Chair, Betty Bergland, Kurt Leichtle, Edward Peterson, David Riggs, Zhiguo Yang
Philosophy: Imtiaz Moosa and David Peters

The Department of History and Philosophy offers courses and degrees for those who wish to obtain a liberal arts degree which teaches how to read, think, and write effectively. Thus, a liberal arts degree is the best preparation for careers in business, advertising, government, foreign service, international relations, publications, journalism, and human services. It also is indicated for those who wish to pursue a career specifically in the field of history including teaching at the elementary, secondary, or college level, or working in museums, archives and libraries. Students take courses in a variety of periods, areas and topics. Majors are encouraged to participate in an internship program for practical preparation for a career. Various options are also offered for study in other countries of the world as part of the degree. Majors are strongly urged to take a course in Women's Studies to truly round off their understanding of the human past. The Broad Field Social Studies Major is recommended for secondary teachers in Wisconsin and Minnesota (see page 120 and 163).

BA and BS Liberal Arts majors as listed on pages 34-35. BS Education majors as listed on pages 47-48.

History Major- Liberal Arts: 36 Total Credits
Major Requirements 15 cr. hrs.
HIST 101 Origins of Civilization 3 cr. hrs.
HIST 102 Origins of One World 3 cr. hrs.
HIST 103 U.S. History to 1877 3 cr. hrs.
HIST 104 U.S. History Since 1865 3 cr. hrs.
HIST 485 History Seminar (writing intensive) 3 cr. hrs.
Required Courses:
Select one of the following Non-Western History courses: 3 cr. hrs.
HIST 201 Introduction to Asian Civilization 3 cr. hrs.
HIST 202 Introduction to Latin American Civilizations 3 cr. hrs.
HIST 206 Native Americans and the United States 3 cr. hrs.
Directed Electives: 18 cr. hrs.
Select two advanced U.S. History courses (numbered 300 or above) 6 Select two advanced non-U.S. History courses (numbered 300 or above) 6 Courses numbered 200 or above 3 cr. hrs

History Minor-Liberal Arts and Education: 24 Total Credits
Required Courses: 12 cr. hrs.
HIST 101 Origins of Civilization 3 cr. hrs.
HIST 102 Origins of One World 3 cr. hrs.
HIST 103 U.S. History to 1877 3 cr. hrs.
HIST 104 U.S. History Since 1865 3 cr. hrs.
Directed Electives: 12 cr. hrs.
Select four HIST courses numbered 200 or above

History-Broad Field social Studies

The Broad Field Social Studies (BFSS) degree is the preferred degree for secondary teaching in the area of social studies. This degree offers many options and great versatility. The program requires that the student have a concentration (a major) in one of the social sciences and then additional work in the other social sciences. The concentration gives the degree maximum flexibility if the student does not continue in the field of education.

General Education Requirements as listed on pages pages 34-35 with the following exceptions:
Social and Behavioral Science:
POLS 114 American, National, State and Local Government
PSYC 101 General Psychology
TED 252 Foundations of Multicultural Education
ESM/GEOL 300 Environmental Education

Professional Secondary Education Requirements
See page 159. 37 Total Credits

History Emphasis
Major Requirements 66 Total Credits
Required Courses: 15 cr. hrs.
HIST 101 Origins of Civilization 3 cr. hrs.
HIST 102 Origins of One World 3 cr. hrs.
HIST 103 U.S. History to 1877 3 cr. hrs.
HIST 104 U.S. History Since 1865 3 cr. hrs.
HIST 485 History Seminar (writing intensive) 3 cr. hrs.
Directed Electives: 21 cr. hrs.
Select two advanced U.S. History courses (numbered 300 or above) 6 Select two advanced non-U.S. History courses (numbered 300 or above) 6 Select two History courses (numbered 300 or above) 6 Select one History course (numbered 200 or above) 3 cr. hrs.
Distribution: 30 cr. hrs.
Select 30 credits from at least two of the following: Anthropology, Economics, Geography, Political Science, Psychology, Sociology
9 credits from each of two of the above areas 18 cr. hrs.
3 credits from each of four of the above areas 12 cr. hrs.

Broad Field Social Science Minor
For the Social Science minor requirements refer to page 162.
The UW-River Falls Honors Program is designed to meet the educational needs of students who have an outstanding record of academic achievement and a true sense of intellectual adventure. It allows students to experience a variety of course types and educationally related experiences while gaining academic credit. Students enrolled in the program may choose Honors sections of many general education classes, take introductory and advanced Honors seminars, participate in Honors colloquia, complete an Honors thesis/project, enroll in a service-learning experience for credit and receive credits for participation in the intellectual and creative life of the UW-RF community and elsewhere. All of these experiences are gained while still keeping within the major and minor requirements of an Honors student's academic program.

Honors Admission Requirements
Incoming freshmen must have a composite ACT score of 27 or higher and/or have graduated in the top 10% of their high school class. Sophomores, juniors, or seniors may enroll if their cumulative grade point average is 3.3 or higher. Students must maintain a 3.3 cumulative grade point average and complete at least two Honors program credits per year to remain in the program. The UW-RF Honors program consists of 18 Honors program credits, all of which are possible to accumulate within the 120 minimum credits necessary to graduate. Requirements for completing the Honors Program include at least 18 honors program credits and no history of academic dishonesty. Honors program seminars, colloquia, and courses will meet General Education or Liberal Arts requirements whenever applicable.

Sections of the following courses may be made available on a rotational basis to Honors Program students:
Fine Arts ART 100, MUS 100, SCTA 105
Social Science ANTH 100, ECON 100, ESM 105, POLS114, SOCI 100
Science BIOL 100, CHEM 111 (discussion groups and/or labs), GEO 101, PHYS 117, 151, 161 (discussion groups and/or labs)
Diversity TED 252-Multicultural Education

Honors Requirements: 18 Total Credits
Required Courses: 2-7 cr. hrs.
HON 181 Honors Seminar I 1 cr. hr.
HON 498 Honors Thesis/Project 1-6
Directed Electives:
Honors Courses 11 cr. hrs.
ENG 115 Accelerated Freshman English 3 cr. hrs.
HUM 255 Arts and Ideas I 4 cr. hr.
HUM 256 Arts and Ideas II 4 cr. hr.
Seminar, Colloquia, and Contracted Credits (variable credits) 1 5 cr. hrs.

Honors Program students enrolled in a non-honors course may contract with the instructor to earn honors credit(s) for different work (i.e. in greater depth). These credits will be recorded as honors
Colloquia 0-2 cr. hrs. Colloquia are optional and repeatable. They are offered in various subject areas and may be supplements to existing courses or sequences, e.g., HON 166 and 167 might be offered by the mathematics department as supplements to MATH 166 and 167.

Honors Thesis/Project 1-6 cr. hrs. Required of all participants during junior or senior year. Participants must submit a project proposal outlining their research hypotheses, methodologies, and expected outcomes, and suggest appropriate faculty reviewers to the Honors Director for approval before commencing their work. Each project will be evaluated by three faculty chosen by the student and approved by the Honors Director. Projects may be graded pass/fail at the student's request. Projects undertaken for departmental senior seminars may be accepted as honors theses/projects at the discretion of the department and the Honors Director.

Service Learning Component 1-6 cr. hrs. Service learning in this context means unpaid volunteer work that will benefit the community and provide a significant learning experience. Service learning is based on the rationale that learning occurs through reflection on the service. At least one credit of service learning is required; one credit equals 45 hours of service learning. Service learning hours must be documented as to the amount of time contributed and the learning component completed. Participants must submit a proposal for service learning project(s) to the Honors Director for their approval prior to the service learning activity. These proposals will describe the service learning activity, outline its connection to the student's course work, and include the signature of the student's proposed field supervisor. Service learning hours may be planned and carried out individually, through the Honors Club, or with another organization. Honors program students are encouraged to arrange service learning activities through other organizations they belong to in order to stimulate participation by other university community members.

Events 0-2 cr. hrs. This component is meant to encourage Honors Program participants to engage in the intellectual and creative life of the UW-River Falls community and elsewhere. Approved events will include attendance or participation in professional meetings, lectures, concerts, plays, and art exhibits. Participants must submit an event proposal to the Director prior to the events describing the events to be attended and, wherever possible, drawing connections between them and the participant's course of study. Five events (12 hours minimum) equal one credit. Participants must provide a portfolio of short reaction papers to each event and appropriate evidence of participation in order to earn credit.

Horticulture (HORT)
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html


General Education Requirements as listed on pages pages 26-27.

Foundation Courses in Agriculture 12 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science or 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGEC230 Agricultural Economics I 3 cr. hrs.
or FDSC 112 Introduction to Food Science or 3 cr. hrs.

Horticulture Major: 69-71 Total Credits
Required HORT Courses: 16 cr. hrs.
HORT 169 Introduction to Horticulture 3 cr. hrs.
HORT 200 Plant Propagation 3 cr. hrs.
HORT 310 Greenhouse Management 3 cr. hrs.
HORT 352 Ornamental Plants 3 cr. hrs.
HORT 455 Turfgrass Science and Management 3 cr. hrs.
HORT 485 Senior Seminar in Horticulture 1 cr. hr.
Required Related Courses: 20 cr. hrs.
SOIL 311 Soil Fertility 4 cr. hr.
BIOL 314 Plant Pathology 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
AGRN 435 Crop Physiology 4 cr. hr.
AGRN 257 Genetics 3 cr. hrs.
or ANSC 257 Genetics or 3 cr. hrs.
Horticulture Options (Choose one)
Professional Horticulture Option 33-35 cr. hrs.
BIOL 333 Entomology 3 cr. hrs.
HORT 327 Vegetable Science and Production (writing intensive) 4 cr. hr.
HORT 347 Fruit Science and Production (writing intensive) 4 cr. hr.
HORT 420 Floriculture (writing intensive) 4 cr. hr.
HORT 270/370 Horticulture Internship 4 cr. hr.
Select one design-related course from the following:
HORT 245 Interior Plantscapes 3 cr. hrs.
or HORT 250 Principles of Landscape Design 3 cr. hrs.
or HORT 268 Herbaceous Perennials 3 cr. hrs.
Select one plant production-related course from the following:
HORT 369 Plant Tissue Culture: Theory and Practice 3 cr. hrs.
or HORT 452 Aboriculture/Nursery Management (writing intensive) 3 cr. hrs.

Landscape Design and Contracting Option 33 cr. hrs.
AGEN 333 Landscape Construction 3 cr. hrs.
AGEN 355 Irrigation and Drainage 3 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
HORT 250 Principles of Landscape Design 3 cr. hrs.
HORT 268 Herbaceous Perennials 3 cr. hrs.
HORT 270/370 Horticulture Internship 4 cr. hr.
HORT 452 Aboriculture/Nursery Management (writing intensive) 3 cr. hrs.
GENG 121 Engineering Drawing 2 cr. hrs.
GENG 235 Surveying 3 cr. hrs.
GENG 368 CAD Applications 2 cr. hrs.
HORT 327 Vegetable Science and Production (writing intensive) 4 cr. hr.
or HORT 347 Fruit Science and Production (writing intensive)
or 4 General Electives 7-10

Business Emphasis
The Business Emphasis is a suggested series of courses that fit together well and complement the horticulture major. It is not necessary to take all of the courses. The courses are taken in addition to either of the two options. The emphasis designation is not printed on the student's transcript.

AGEC 360 Farm Management 3 cr. hrs.
Select one from:
- ACCT 231 Principles of Accounting I 3 cr. hrs.
- AGEC 305 Agricultural Business Accounting 3 cr. hrs.
Select one from:
- BLAW 265 Business Law I 3 cr. hrs.
- AGEC 345 Agricultural Law 3 cr. hrs.
Select two from:
- AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
- AGEC 368 Professional Selling 3 cr. hrs.
- AGEC 468 Agribusiness Firm Management 3 cr. hrs.
- MNGT 265 The Computer in Business 3 cr. hrs.
- FINC 345 Managerial Finance 3 cr. hrs.

Horticulture Minor: 22-23 Total Credits
Required Courses: 19 cr. hrs.
- HORT 169 Introduction to Horticulture 3 cr. hrs.
- HORT 200 Plant Propagation 3 cr. hrs.
- HORT 310 Greenhouse Management 3 cr. hrs.
- HORT 352 Ornamental Plants 3 cr. hrs.
- BIOL 314 Plant Pathology 3 cr. hrs.
Select one from:
- HORT 327 Vegetable Science and Production 4 cr. hr.
- HORT 347 Fruit Science and Production 4 cr. hr.
Directed electives: 3-4 cr. hrs.
(any HORT course, consult with horticulture faculty)

Hydrogeology
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html


Hydrogeology Minor: 21 Total Credits
Required Courses 18 cr. hrs.
- ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
- GEOL 445 Hydrogeology 4 cr. hr.
SOIL 460 Soil Physics 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
Electives-Select from the following: 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 452 Instrumental Analysis 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.
ESM 413 Environmental Analysis 4 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hr.
GEOL 362 Stratigraphy and Sedimentation 4 cr. hr.
GEOL 441 Geophysics 4 cr. hr.

International Studies (INTS)
Interdisciplinary Program

(715) 425-3318/3798
Web Site: http://www.uwrf.edu/international_studies/welcome.html

International Studies Advisory Committee:
Program coordinator-Wes Chapin, political science; Mike Albert, geography; Jackie Brux, Economics; Cecilia Bustamante, modern language; David Trechter, agricultural economics

The International Studies Minor is designed to complement a student's major. Given the global economy that is rapidly evolving, training in international studies is likely to increase the employment potential of almost any student. Students completing the minor will acquire a firm understanding of the critical international issues confronting our global society including, but not limited to, armed conflict; economic interdependence; world food, environmental, and population issues; political change; and human rights. They will be able to critically evaluate these problems, and proposed solutions to them, from an interdisciplinary perspective the minor draws on expertise from all of the colleges on campus. Students completing the minor will also obtain a greater appreciation for and understanding of the key cultural differences that exist around the world. They will develop basic linguistic skills and can participate in overseas study programs as an optional part of the minor's curriculum. This minor should be particularly attractive to students who wish to learn more about international issues and/or want to pursue careers with an international emphasis. It can be completed readily as either a first or second minor. Contact the Program Coordinator and/or consult the website at http://www.uwrf.edu/international_studies/welcome.html for more information.

International Studies Minor: 24 Total Credits
Foreign Language Requirement: (credits not counted as part of minor) 0-8 cr. hrs.
This requirement can be fulfilled in one of the following ways:
1. Completing the first two semesters of any language offered at UW-RF (Chinese, French, German, Japanese, Spanish)
2. Testing out of the first semester and completing the second. A student may take the testout based on either high school language classes or study undertaken independently.
3. Testing out of the entire year. The student is encouraged to complete the first semester of the second year, thereby receiving credits for the testout; otherwise, the language requirement will be considered fulfilled, but no credit will appear on the transcript.
4. Transferring the equivalent of a first-year language sequence in any foreign language from another university.
Required Courses: 12 cr. hrs.
INTS 200 Introduction to International Studies 3 cr. hrs.
AGEC250 World Food and Population 3 cr. hrs.
GEOG 120 Human Geography 3 cr. hrs.
POLS 260 Introduction to International Relations 3 cr. hrs.

Directed Electives: 12 cr. hrs.
Select 12 credits, spread over at least three of the seven categories below. No more than six credits can come from any one of categories A-F, and only three credits can come from category G.
Credit for INTS 379, 389, 490, or 499 can be applied to these categories after consultation with the Program Coordinator.

Category A up to 6 cr. hrs.
ART 314 Art of India, China, and Japan 2 cr. hrs.
ART 318 Latin American Art 2 cr. hrs.
ENGL 341 European Literature 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
ENGL 441 Twentieth Century International Literature 3 cr. hrs.
HUM 256 Arts and Ideas II 4 cr. hr.
HUM 261 World Arts 1 cr. hr.
MUS 300 World Music 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.

Category B up to 6 cr. hrs.
HIST 303 Women's History: Europe 3 cr. hrs.
HIST 305 Women's History: Global Perspectives 3 cr. hrs.
HIST/PHIL/POLS 308 Western Political Thought: The Renaissance through Marx 3 cr. hrs.
HIST/PHIL/POLS 309 Western Political Thought: Nietzsche to the 20th Century 3 cr. hrs.
HIST 328 World War II to the Cold War 3 cr. hrs.
HIST 330 Revolutions in Modern History 3 cr. hrs.
HIST/POLS 349 Modern Middle East History and Politics 3 cr. hrs.
HIST 359 U.S. History from 1945 3 cr. hrs.
HIST/POLS 367 History of U.S. Foreign Policy 3 cr. hrs.
HIST 436 History of Colonialism and Imperialism 3 cr. hrs.
POLS 344 Politics of the Developing World 3 cr. hrs.
POLS 346 Politics of Western Europe 3 cr. hrs.
POLS 348 Politics of East Asia 3 cr. hrs.
POLS 365 American Foreign Policy 3 cr. hrs.
POLS 369 International Political Economy 3 cr. hrs.
POLS 377 The United Nations 1 cr. hr.

Category C up to 6 cr. hrs.
ANTH/SOCI 211 Sociology of Childhood 3 cr. hrs.
ANTH/SOCI 221 Global Perspectives on Women 3 cr. hrs.
ANTH/SOCI 338 Global Perspectives on Health and Disease 3 cr. hrs.
ANTH/SOCI 348 Faces of Culture 3 cr. hrs.
ANTH/SOCI 435 Social and Cultural Change 3 cr. hrs.
GEOG 220 Economic Geography 3 cr. hrs.
GEOG 242 Canada 3 cr. hrs.
GEOG 340 Europe 3 cr. hrs.
GEOG 342 Latin America 3 cr. hrs.
GEOG 343 Africa 3 cr. hrs.
GEOG 344 Asia and Oceania 3 cr. hrs.
SOCI 340 Sociology of Rural Life 3 cr. hrs.

Category D up to 6 cr. hrs.
ACCT311 International Accounting 3 cr. hrs.
AGEC441 Agricultural Policy II 3 cr. hrs.
AGRN 462 Agricultural Ecology 2 cr. hrs.
ECON 328 Domestic Topics in Third World Economic Development 3 cr. hrs.
ECON 329 International Topics in Third World Economic Development 3 cr. hrs.
ECON 340 Contemporary International Trade Issues 3 cr. hrs.
ECON/FINC 342 International Finance 3 cr. hrs.
ECON 344 Comparative Economic Systems 3 cr. hrs.
ECON 354/MNGT 355 International Business 3 cr. hrs.
ECON/MKTG 356 International Marketing 3 cr. hrs.
JOUR 460 International Communication 3 cr. hrs.
MNGT 310 Culture and Business 3 cr. hrs.
MNGT 380 International Business Seminar 3 cr. hrs.

Category E up to 6 cr. hrs.
FREN 301 French Conversation and Composition 3 cr. hrs.
FREN 302 French Conversation and Composition II 3 cr. hrs.
FREN 341 French Civilization 3 cr. hrs.
FREN 342 Modern France and Francophone Cultures 3 cr. hrs.
FREN 351 Survey of French Literature to 1800 3 cr. hrs.
FREN 352 Survey of French Literature 1800 to Present 3 cr. hrs.
FREN 401 Advanced French Communication 3 cr. hrs.
FREN 451 French Prose Fiction 3 cr. hrs.
or FREN 452 French Poetry 3 cr. hrs.
or FREN 453 French Drama 3 cr. hrs.
GERM 275 Business German 3 cr. hrs.
GERM 301 German Conversation and Composition 3 cr. hrs.
GERM 302 German Conversation and Composition II 3 cr. hrs.
GERM 341 German Civilization 3 cr. hrs.
GERM 342 Modern German-Speaking Cultures 3 cr. hrs.
GERM 351 Survey of German Literature to Classicism (1800) 3 cr. hrs.
GERM 352 Survey of German Literature from Classicism (1800) to Present 3 cr. hrs.
GERM 401 Advanced German Communication 3 cr. hrs.
GERM 451 German Drama and Theater 3 cr. hrs.
or GERM 452 German Tale, Short Story, and Novella 3 cr. hrs.
or GERM 453 German Poetry 3 cr. hrs.
SPAN 301 Spanish Composition and Conversation 3 cr. hrs.
SPAN 302 Spanish Composition and Conversation II 3 cr. hrs.
SPAN 341 Spanish Civilization to 1800 3 cr. hrs.
SPAN 342 Spanish Civilization 1800 to Present 3 cr. hrs.
SPAN 345 Latin American Civilization to 1800 3 cr. hrs.
SPAN 346 Latin American Civilization 1800 to Present 3 cr. hrs.
SPAN 351 Survey of Spanish Literature to 1800 3 cr. hrs.
SPAN 352 Survey of Spanish Literature 1800 to Present 3 cr. hrs.
SPAN 355 Survey of Latin American Literature to 1800 3 cr. hrs.
SPAN 356 Survey of Latin American Literature 1800 to Present 3 cr. hrs.
SPAN 401 Advanced Spanish Communication 3 cr. hrs.
SPAN 452 Advanced Spanish Literature 3 cr. hrs.
SPAN 455 Advanced Latin American Literature 3 cr. hrs.

Category F up to 6 cr. hrs.
ART/HIST 375 Study Tour of Northern France and the Lowlands 1 cr. hr.
ART/ENGL 376 Experience Greece: Culture Past and Present 1-3
HIST 371 Study Tour Research 1-3
INTS 370 International Study Tour 1-3
INTS 377 Semester Abroad 6
MODL 376 Mexico: A Cultural Experience 3 cr. hrs.
MODL 377 Foreign Study 6
271 CAFES depts. International Internship 4 cr. hr.
TED Education Teaching courses Overseas Practice Teaching 6
378 within depts. Semester Abroad Research 3-6

Category G up to 3 cr. hrs.
DANC 100 History/Appreciation of Dance 3 cr. hrs.
ESM 105 Introduction to Environmental Studies 3 cr. hrs.
GEOG 212 Weather and Climate 3 cr. hrs.
GEOG 214 World Patterns of Plants and Animals 3 cr. hrs.
GEOL 202 Oceanography 2 cr. hrs.
GEOL 269 Environmental Geology 2 cr. hrs.
HIST 102 Origins of One World 3 cr. hrs.
HIST 201 Introduction to Asian Civilization 3 cr. hrs.
HIST 202 Introduction to Latin American Civilizations 3 cr. hrs.
POLS 245 Introduction to Comparative Politics 3 cr. hrs.

Journalism (JOUR)
Department of Journalism
College of Arts and Sciences

330 Kleinpell Fine Arts
(715) 425-3169
FAX: (715) 425-0658
Web Site: www.uwrf.edu/journalism Colleen

Callahan-Chair, Patricia Berg, Sandra Ellis, Michael Norman. Adjuncts: Richard McNamara, Lorin Robinson

The Department of Journalism is one of 108 programs in the United States accredited by the Accrediting Council on Education in Journalism and Mass Communications. In order to maintain accreditation and to fulfill the department mission of providing journalism students with a broad liberal arts education, all majors must take a minimum of 80 credit hours outside journalism and mass communication courses, including a minimum of 65 credit hours in the liberal arts and sciences. A student majoring in journalism may not double major or minor in the Mass Communication Emphasis offered in the SCTA department. A journalism major may select the News-Editorial (print) emphasis or Broadcast emphasis. All journalism majors must take five supporting courses outside the major, specified under the Supporting Courses category. The five courses may be counted anywhere in the student's degree program: General Education, Liberal Arts, a second major, a minor, or general electives.
Journalism and Secondary Education. Students interested in teaching journalism and/or serving as a news or yearbook advisor at the secondary school may major or minor in journalism and select the News-Editorial (print) emphasis or the Broadcast emphasis, and must take a second teaching area major such as English or broad area studies. The student should also consult with the dean of the College of Education for specific teaching requirements.

Journalism and Agriculture. This program is designed for students who wish to pursue a career in agricultural journalism. The student will develop a major in journalism and a second major or minor in the College of Agriculture, Food and Environmental Sciences. Students may select the News-Editorial (print) emphasis or Broadcast emphasis. Journalism majors may substitute AGED 230 (Agricultural News Writing) for three credits of journalism free electives.

Marketing Communications Major. Journalism is one of seven academic departments participating in the interdisciplinary major in Marketing Communications. For more information about this major, see page 133.

Film Studies Minor. Journalism is one of the departments from which courses may be taken for the Minor in Film Studies. For more information about this minor, see page 108.

Professional Writing Minor. Journalism is one of the subject fields included in the Department of English Professional Writing Minor. For more information about this minor, see page 155.

International Studies Minor. Journalism is one of the departments offering a directed elective (JOUR 460) that may be taken for the International Studies Minor. For more information about this minor, see page 126.

BA and BS Liberal Arts majors as listed on pages 34-35. BS Education majors as listed on pages 47-48.

Journalism Major/News-Editorial Emphasis
Major Requirements 35 Total Credits
Core Requirements: 23 cr. hrs.
JOUR 101 Introduction to Mass Communication 3 cr. hrs.
JOUR 112 Writing for the Mass Media 3 cr. hrs.
JOUR 113 Beginning Reporting for the Print Media 3 cr. hrs.
JOUR 180 Freshman Seminar 1 cr. hr.
JOUR 251 Advanced News Reporting I 3 cr. hrs.
JOUR 252 Advanced News Reporting II 3 cr. hrs.
JOUR 351 Editing for Print Media 3 cr. hrs.
JOUR 465 Mass Communication Law 3 cr. hrs.
JOUR 480 Senior Seminar 1 cr. hr.
Directed Electives: Select one 3 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs
JOUR 345 History of Mass Communication 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
JOUR 460 International Communication 3 cr. hrs.
Journalism Electives: 9 cr. hrs.
Required Supporting Courses:
POLS 253 State and Local Politics
or POLS 211 Government and Politics in Minnesota and Wisconsin
Journalism Minor/News-Editorial Emphasis: 24 Total Credits
Core Requirements: 18 cr. hrs.
JOUR 101 Introduction to Mass Communication 3 cr. hrs.
JOUR 112 Writing for the Mass Media 3 cr. hrs.
JOUR 113 Beginning Reporting for the Print Media 3 cr. hrs.
JOUR 251 Advanced News Reporting I 3 cr. hrs.
JOUR 351 Editing for Print Media 3 cr. hrs.
JOUR 465 Mass Communication Law 3 cr. hrs.
Directed Electives: Select one 3 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
JOUR 460 International Communication 3 cr. hrs.
Journalism Electives: 3 cr. hrs.

Journalism Major/ Broadcast Emphasis: 35 Total Credits
Core Requirements: 23 cr. hrs.
JOUR 101 Introduction to Mass Communication 3 cr. hrs.
JOUR 112 Writing for the Mass Media 3 cr. hrs.
JOUR 115 Broadcast News Writing 3 cr. hrs.
JOUR 120 Radio and Television Field Production 3 cr. hrs.
JOUR 180 Freshman Seminar 1 cr. hr.
JOUR 241 Broadcast News Reporting and Editing 3 cr. hrs.
JOUR 242 Television News 3 cr. hrs.
JOUR 465 Mass Communication Law 3 cr. hrs.
JOUR 480 Senior Seminar 1 cr. hr.
Directed Electives: Select one 3 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
JOUR 460 International Communication 3 cr. hrs.
Journalism Electives: 9 cr. hrs.
Required Supporting Courses:
POLS 253 State and Local Politics
or POLS 211 Government and Politics in Minnesota and Wisconsin
POLS Any international course
HIST 104 U.S. History Since 1865
HIST Any international course
ECON 201 Principles of Microeconomics
or ECON 202 Principles of Macroeconomics

Journalism Minor/ Broadcast Emphasis: 24 Total Credits
Core Requirements: 18 cr. hrs.
JOUR 101 Introduction to Mass Communication 3 cr. hrs.
JOUR 112 Writing for the Mass Media 3 cr. hrs.
JOUR 115 Broadcast News Writing 3 cr. hrs.
JOUR 120 Radio and Television Field Production 3 cr. hrs.
JOUR 241 Broadcast News Reporting and Editing 3 cr. hrs.
JOUR 465 Mass Communication Law 3 cr. hrs.
Directed Electives: Select one 3 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
JOUR 460 International Communication 3 cr. hrs.
Journalism Electives: 3 cr. hrs.

Land Use Planning
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html


The land use planning major is designed for those students wishing to pursue a career in public or private planning, zoning, administration/management and sustainable development. The curriculum provides instruction in foundational planning principles and practices, as well as hands-on technical training. The course content focuses on planning issues at the rural/urban interface. It is an excellent major to combine with a wide variety of minors (e.g., cartography/GIS, business administration, political science, etc.) to develop a unique professional niche.

General Education Requirements as listed on pages pages 26-27.

Land Use Planning Major
Land Use Planning Core 32-34 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. hrs.
ESM 270 Internship I 2-4 cr. hr.
ESM 303 Environmental Policies and Administration 3 cr. hrs.
ESM 307 Multicultural Perspectives on the Environment 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 363 GIS Application in Resource Management 3 cr. hrs.
ESM 411 Site Planning and Development 4 cr. hr.
ESM 435 Advanced Land Use Planning and Design 4 cr. hr.
ESM 485 Seminar in Resource Management 1 cr. hr.
SOIL 210 Introductory Soil Science 3 cr. hrs.
Required Supporting Courses 15 cr. hrs.
GENG 235 Surveying 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 360 Introduction to Geographic Information Systems 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
or SCTA 211 Public Speaking 3 cr. hrs.
or AGED 202 Leadership and Group Dynamics 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
or ENGL 266 Business Writing 3 cr. hrs.
Directed Electives: 19-23 cr. hrs.
AGEC 230, 231, 250, 320, 345, 355, 440, 441, 450; AGEN 150, 240, 325, 365, 425, 443; ANTH 205; BOL 310, 314, 320, 333, 344, 350, 354, 355, 360, 434, 444; ECON All except 100; ESM 109, 343, 360, 365; ETHN 200; FINC 342, 350; GENG 121, 201, 236, 265, 368; GEOG All except 120, 250, 360; GEOL 445; HEAL 350; HIST All except 102, 103, 104; HORT All; INTS 377, 378; MATH 156, 216, 226, 326, 356, 357; MGNT 150, 205, 310, 326, 355; MODL 376, 377; PHIL 240, 303, 304; POLS All except 114, 260; SCTA 106, 111, 207, 222; SOCI All except 100; SOIL All except 210; SOWK 150, 205, 215, 260, 300

Land Use Planning Minor: 23 Total Credits
Required Courses:
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
ESM 303 Environmental Policies and Administration 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 363 GIS Applications in Resource Management 3 cr. hrs.
ESM 411 Site Planning and Development 4 cr. hr.
ESM 435 Advanced Land Use Planning and Design 4 cr. hr.
GEOG 250 Cartography I 3 cr. hrs.

Language Arts/Reading
Department of English
College of Arts and Sciences
245 Kleinpell Fine Arts Building
(715) 425-3537
Web Site: www.uwrf.edu/english/welcome.html


The Language Arts/Reading minor is one of eight recommended by the Department of Public Instruction and the College of Education and Professional Studies for Elementary Education majors who must choose a minor. They select this minor to provide breadth of understanding and skills in English (literature, language and writing), speech, and reading. Course work will support both the specific teaching of these areas and also the teaching of other subjects (i.e. reading, speaking, and writing across the curriculum). Students who choose this minor should plan their programs with Dr. Nicholas Karolides, advisor for the minor.

Language Arts/Reading Minor: 24 Total Credits
Required Courses: 18 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 350 Children's Literature: Issues and Trends 3 cr. hrs.
ENGL 361 Composition Theory 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
or SCTA 327 Children's Theatre and Puppetry
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.
Directed Electives 6 cr. hrs.
Select two of the following courses:
ENGL 233 Introduction to Poetry 3 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
or SCTA 327 Children's Theatre and Puppetry
SCTA 313 Intercultural Communication 3 cr. hrs.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.
SCTA 407 Listening Instruction 3 cr. hrs.
TED 410 Early Child/Language Arts 3 cr. hrs.

Marketing Communications (MARC)
Interdisciplinary

336 Kleinpell Fine Arts Building (715) 425-3899; FAX (715) 425-0658 www.uwrf.edu/marcomm/

Stephen Olsen, Marketing Communications-Chair, Richard Beckham, English; Michael Padgett, art;
Jacque Foust, business administration; Tamia Trulson, agricultural education; Lewis May,
agricultural economics; Michael Norman, journalism; James Pratt, speech communication and
theatre arts.

The interdisciplinary Marketing Communications major integrates the activities of advertising, public
relations, sales promotion, direct marketing, personal selling and cybermarketing into a single
professional field of expertise. Students will develop knowledge and skills in oral, written and visual
modes of communication. In addition to an introductory course and senior seminar in marketing
communications, students will take courses from as many as seven departments in three colleges.
Practical experience with current technology tools and a required internship program ensure that
students have not only strong academic preparation, but also practical experience in marketing
communications activities. A student may complete the major in Marketing Communications in the
College of Arts and Sciences, the College of Agriculture, Food and Environmental Sciences, or in the
College of Business and Economics. Please consult the dean of the respective college for college-
specific course requirements. It is recommended that a student completing the major in CBE or
CAFES have a minor in that college. A minor is not offered in Marketing Communications.

General Education Requirements:
Arts and Sciences as listed on pages 34-35,
Agriculture, Food and Environmental Sciences as listed on pages 26-27,
or Business and Economics as listed on pages 44-45, with the following exceptions:
Communication: SCTA 116 Business and Professional Communication
Math: Proficiency in understanding statistics is required and may be demonstrated by completing
one of the following: MATH 216, PSYC 201,
ECON 226, MATH 226, AGEC320, ANSC 341, or an equivalent course. Completion of a listed
statistics course may fulfill the general education mathematics requirement. See your advisor for
further information. Prior to graduation, students must complete and present a professional
portfolio for approval to the Marketing Communications Unit. An internship or approved directed
work experience is required. It is the student’s responsibility to originate an internship or directed
work experience that meets Marketing Communications departmental criteria. Internships and
directed work experiences must be approved by the Marketing communications internship
supervisor before the work is done. Students must maintain a 2.50 grade point average in the
Marketing Communications major.
Marketing Communications Major: 42 Total Credits
Core Requirements: 25-28 cr. hrs.
JOUR 101 Intro to Mass Communications
or AGED 110 Agricultural Communications 3 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.
JOUR 112 Writing for the Mass Media 3 cr. hrs.
MARC 200 Introduction to Marketing Communications 3 cr. hrs.
MARC 480 Seminar in Theory and Methods of Marketing Communications 3 cr. hrs.
MKTG 311 Principles of Marketing for Marketing Communications Majors 3 cr. hrs.
MKTG 312 Consumer Behavior 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
Choose one of the following internship courses:
MARC 379 Internship in Marketing Communications
or MARC 279 Cooperative Education/Directed Work Experience
or 270/370 if enrolled in CAFES, any CAFES department internship
MARC 279/379 may be combined and/or repeated for a total of 4 credit hours. 2-4 cr. hr.
Directed Electives: 14-17 cr. hrs.
Writing Electives-Select one from:
AGED/JOUR 230 Agricultural News Writing 3 cr. hrs.
ENGL 266 Business Writing 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
JOUR 351 Editing for Print Media 3 cr. hrs.
Visual Electives-Select one from:
ART 235 Intro to Black and White Photography 3 cr. hrs.
JOUR 120 Radio and TV Field Production 3 cr. hrs.
JOUR 265 Beginning Photography 3 cr. hrs.
SCTA 160 TV Studio Production 3 cr. hrs.
SCTA 260 Electronic Field Production 3 cr. hrs.
Marketing/Promotion Electives-Select one from:
AGEDC368 Professional Selling 3 cr. hrs.
MKTG 365 Marketing Research 3 cr. hrs.
JOUR 260 Principles of Public Relations 3 cr. hrs.
JOUR 363 Advertising Principles 3 cr. hrs.
Other Electives-Select from the following courses or consult with department chair or advisor for additional elective choices to total 42 credits required in the major: Please check the course descriptions in this catalog for course prerequisites.
AGEDC355 Agricultural Markets and Prices 3 cr. hrs.
AGEDC368 Professional Selling 3 cr. hrs.
AGED 230 Agricultural News Writing 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 303 Advertising Design II 3 cr. hrs.
ENGL 266 Business Writing 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
JOUR 120 Radio and Television Field Production 3 cr. hrs.
JOUR 230 Agricultural News Writing 3 cr. hrs.
JOUR 260 Introduction to Public Relations 3 cr. hrs.
JOUR 261 Public Relations Methods 3 cr. hrs.
JOUR 265 Beginning Photography 3 cr. hrs.
JOUR 351 Editing for Print Media 3 cr. hrs.
JOUR 362 Advertising Principles 3 cr. hrs.
JOUR 363 Advertising Methods 3 cr. hrs.
JOUR 465 Mass Communications Law 3 cr. hrs.
MKTG 352 Business to Business Marketing 3 cr. hrs.
MKTG 355 International Marketing 3 cr. hrs.
MKTG 365 Marketing Research 3 cr. hrs.
PHIL 316 Media Ethics 3 cr. hrs.
SCTA 316 Organizational Communication 3 cr. hrs.

Mass Communication
Department of Speech Communication and Theatre Arts
College of Arts and Sciences

B-24 Kleinpell Fine Arts Building
(715) 425-3971
Web Site: http://www.uwrf.edu/scta/

Margaret M. Swanson-Chair, Suzanne Hagen, Robin Murray, James Pratt, Ronald Snell, Kenneth Stofferahn, Richard Vogel, Barbara L. Werner, James Zimmerman

Mass Communication Minor: 24 Total Credits
Required Courses 12 cr. hrs.
SCTA 151 Broadcast Performance 3 cr. hrs.
SCTA 160 TV Studio Production 3 cr. hrs.
SCTA 260 Electronic Field Production 3 cr. hrs.
SCTA 261 Electronic Media Copy Writing 3 cr. hrs.

Directed Electives 12 cr. hrs.
Choose one of the following: 3 cr. hrs.
SCTA 310 Media Literacy—A Weapon Against Propaganda
SCTA 353 Mass Media and Popular Culture
SCTA 340 Gender, Race, Ethnicity and Class in Media
Choose one of the following: 3 cr. hrs.
SCTA 360 Corporate Electronic Communication
SCTA 458 Broadcast Programming and Criticism
Choose one of the following: 3 cr. hrs.
SCTA 311 Persuasion
JOUR 345 History of Mass Communication
Choose one of the following: 3 cr. hrs.
SCTA 284 Sophomore Seminar
SCTA 200 Introduction to Film Studies
SCTA 248 Film—Cultures in Conflict
SCTA 301 History of Film

A research/writing course experience is required in the major or another field;
SCTA 284 Sophomore Seminar or another course approved by the department chair, will satisfy this requirement.

A senior portfolio experience is required in the major or another field;
SCTA 484, Senior Portfolio experience is required in the major or another field;
SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.

Mathematics (MATH)
Department of Mathematics
College of Arts and Sciences
The Mathematics Department offers two options for mathematics majors, the liberal arts option and the education option. Both are based on a common core curriculum of 18 credit hours.
1. The liberal arts mathematics major is designed for students who desire a general education in mathematics as a background for graduate school or a career related to mathematics.
2. The education mathematics major is designed for prospective secondary school teachers. The curriculum provides the student with (1) specialized preparation in mathematics and (2) professional training required to obtain teacher certification.

BA and BS Liberal Arts majors as listed on pages 34-35, BS Education majors as listed on pages 47-48.

Mathematics Major - Liberal Arts: 37 Total Credits
Required Courses: 19 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 485 Seminar in Mathematics (writing intensive) 1 cr. hr.
Directed Electives: 18 cr. hrs.
Select at least six mathematics courses numbered higher than 300, excluding Math 436
Required Supporting Courses: 3 cr. hrs.
select one from
MATH 205 Mathematical Programming 3 cr. hrs.
or CPTS 162 Programming II or 3 cr. hrs.

Mathematics Major - Education
Professional Education Courses 34 cr. hrs.
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 212 Educational Psychology 5
TED 438 Techniques in Middle/Sec. Education: Mathematics 3 cr. hrs.
TED 420 School and Society 3 cr. hrs.
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
TED 423 Writing, Speaking and Listening in the Content Area 3 cr. hrs.
PSYC 330 Exceptional Child 3 cr. hrs.
TED 474 Student Teaching-Secondary only 12 cr. hrs.
or TED 473 & 474 Student Teaching-Middle/Secondary (6 cr. each)
or 12 cr. hrs.
Additional Courses for Middle School Certification 5 cr. hrs.
TED 414 Development of the Transescent 3 cr. hrs.
COUN 310 Counseling Skills for Teachers 2 cr. hrs.
Recommended for Middle School certification:
MATH 248 Elementary Mathematics from an Advanced Standpoint (3) Major Requirements 36
Total Credits
Required Courses: 30 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 351 Abstract Algebra 3 cr. hrs.
MATH 356 Probability 3 cr. hrs.
MATH 411 Geometry 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
or MATH 357 Mathematical Statistics or 3 cr. hrs.
Directed Electives: 6 cr. hrs.
Select at least two mathematics courses numbered higher than 300, excluding MATH 371, 379 and 436
Required Supporting Courses: 5 cr. hrs.
MATH 436 History of Mathematics (writing intensive) 2 cr. hrs.
CPTS 460 Integrating Technology in Teaching Mathematics 3 cr. hrs.

Mathematics Minor - Liberal Arts: 24 Total Credits
Required Courses: 18 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
Directed Electives: 6 cr. hrs.
Select at least two mathematics courses numbered higher than 300, excluding MATH 436
Required Supporting Courses: 3 cr. hrs.
select one from
MATH 205 Mathematical Programming 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
PHYS 211 Scientific Programming 3 cr. hrs.

Mathematics Minor - Education: 24 Total Credits
Required Courses: 21 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
MATH 411 Geometry 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select one mathematics course numbered 266 or higher excluding MATH 279, 371, 379 and 436
Required Supporting Courses: 5 cr. hrs.
MATH 436 History of Mathematics 2 cr. hrs.
CPTS 460 Integrating Technology in Teaching Mathematics 3 cr. hrs.
Professional Courses (in addition to the major) 3 cr. hrs.
TED 438 Techniques in Middle/Sec. Education: Mathematics 3 cr. hrs.
Additional Courses for Middle School Certification 5 cr. hrs.
TED 414 Development of the Transescent 3 cr. hrs.
COUN 310 Counseling Skills for Teachers 2 cr. hrs.
Recommended for Middle School certification:
MATH 248 Elementary Mathematics from an Advanced Standpoint (3)

Mathematics Minor - For Elementary Education Majors
Minor Requirements 22-23 Total Credits
Required Courses: 16 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 216 Elementary Statistical Concepts 3 cr. hrs.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 248 Elementary Mathematics from an Advanced Standpoint 3 cr. hrs.
MATH 436 History of Mathematics 2 cr. hrs.
Directed Electives: 6-7 cr. hrs.
select two of the following
MATH 167 Calculus II 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 306 Number Theory 3 cr. hrs.
MATH 336 Combinatorics and Graph Theory 3 cr. hrs.
MATH 351 Abstract Algebra 3 cr. hrs.
MATH 356 Probability 3 cr. hrs.
CPTS 360 LOGO for Teachers 3 cr. hrs.
MATH 361 Symbolic Logic 3 cr. hrs.
MATH 411 Geometry 3 cr. hrs.

Mathematics Minor - Business or Social Science: 24 Total Credits
Required Courses: 18 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 226 Fundamental of Statistics 3 cr. hrs.
or MATH 326 Applied Statistics
Directed Electives: 6 cr. hrs.
Select two mathematics courses numbered 300 or higher, excluding MATH 326 and 436

Middle School Certification
Department of Teacher Education (TED)
College of Education and Professional Studies
257 Wyman Education Building
(715) 425-3230
Web Site: www.uwrf.edu/college-of-education/

Teri Crotty-Chair, Stephanie Harty, Tim Holleran, Angela Kaiser, Lee Karnowski, DeAn Krey, Mary Lundeberg, Florence Monsour, David Pepi, Margaret Phinney, Geoffrey Scheurman, José E. Vega, So-young Zeon

UW-River Falls Certification for Middle School is available for elementary education majors and
provides State of Wisconsin Certification in grades 1-9. In addition to the elementary education
major requirements, this certification consists of four components:
1. Selection of a content area minor consistent with middle school curriculum.
2. TED 414 Development of the Transescent 3 cr. hrs.
3. COUN 310 Counseling Skills for Teachers 2 cr. hrs.
4. TED 473 Student Teaching (prerequisite TED 414)
An additional half semester (nine weeks) teaching experience in a middle school. Additional courses may be needed to meet DPI requirements.

Modern Language (MODL)
Department of Modern Language
College of Arts and Sciences

284 Kleinpell Fine Arts Building
(715) 425 3121
Web Site http://www.uwrf.edu/modlang/

Margarita Hendrickson-Chair, Cecilia Bustamante, Kristine Butler, Monika Johansson, Peter Johansson, Terrence Mannetter, Lisa Myhre

The Modern Language Department offers a major in modern language with French, German and Spanish options. These programs lead to a B.A. or B.S. degree in liberal arts or a B.S. degree in secondary education. Minors are offered in French, German and Spanish. Two years of Chinese and Japanese are also available. Students who have studied a modern language in high school should take the Wisconsin Modern Language Placement Test, offered in spring Regional Testing and during all registration periods. Students may test out of up to fourteen credits. Test-out credits are not granted until the student completes the next level course with the grade of B or better.

BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Modern Language Major - Liberal Arts: 34 Total Credits
French Option-Liberal Arts
Required Courses: 31 cr. hrs.
FREN 102 Beginning French II 4 cr. hr.
FREN 201 Intermediate French I 3 cr. hrs.
FREN 202 Intermediate French II 3 cr. hrs.
FREN 301 Conversation and Composition I 3 cr. hrs.
FREN 302 Conversation and Composition II 3 cr. hrs.
FREN 341 French Civilization 3 cr. hrs.
FREN 342 Modern France and Francophone Cultures 3 cr. hrs.
FREN 351 Survey of French Literature to 1800 3 cr. hrs.
FREN 352 Survey of French Literature 1800 to present 3 cr. hrs.
FREN 401 Advanced French Communication 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select 3 cr. hrs.
FREN 451 French Prose Fiction 3 cr. hrs.
FREN 452 French Drama 3 cr. hrs.
FREN 453 French Poetry 3 cr. hrs.
FREN 490 Readings in French 1-3
MODL 379 Internship in Modern Language 2-3
French Option-Education
Required Courses: 31 cr. hrs.
FREN 102 Beginning French II 4 cr. hr.
FREN 201 Intermediate French I 3 cr. hrs.
FREN 202 Intermediate French II 3 cr. hrs.
FREN 301 Conversation and Composition I 3 cr. hrs.
FREN 302 Conversation and Composition II 3 cr. hrs.
FREN 341 French Civilization 3 cr. hrs.
FREN 342 Modern France and Francophone Cultures 3 cr. hrs.
FREN 351 Survey of French Literature to 1800 3 cr. hrs.
FREN 352 Survey of French Literature 1800 to present 3 cr. hrs.
FREN 401 Advanced French Communication 3 cr. hrs.
Required supporting courses not part of major: 5 cr. hrs.
FREN 350 French Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

German Option-Liberal Arts
Required Courses: 19 cr. hrs.
GERM 102 Beginning German II 4 cr. hr.
GERM 201 Intermediate German I 3 cr. hrs.
GERM 202 Intermediate German II 3 cr. hrs.
GERM 301 Conversation and Composition I 3 cr. hrs.
GERM 302 Conversation and Composition II 3 cr. hrs.
GERM 401 Advanced German Communication 3 cr. hrs.
Directed Electives: 15 cr. hrs. Select 12 credits from: GERM 275 Business German 3 cr. hrs.
GERM 315 German Classic and Modern Film 3 cr. hrs.
GERM 341 German Civilization 3 cr. hrs.
GERM 342 Modern German-speaking Cultures 3 cr. hrs.
GERM 351 Survey of German Literature to Classicism 3 cr. hrs.
GERM 352 Survey of German Literature from Classicism to Present 3 cr. hrs.
Select 3 credits from:
GERM 451 German Drama and Theatre 3 cr. hrs.
GERM 452 German Tale, Short Story and Novella 3 cr. hrs.
GERM 453 German Poetry 3 cr. hrs.
GERM 490 Readings in German 1-3
MODL 379 Internship in Modern Language 2-3
German Option-Education Complete German major option program (must include 341 and/or 342)
Required supporting courses not part of major: 3 cr. hrs.
GERM 350 German Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

Spanish Option-Liberal Arts
Required Courses: 19 cr. hrs.
SPAN 102 Beginning Spanish II 4 cr. hr.
SPAN 201 Intermediate Spanish I 3 cr. hrs.
SPAN 202 Intermediate Spanish II 3 cr. hrs.
SPAN 301 Conversation and Composition I 3 cr. hrs.
SPAN 302 Conversation and Composition II 3 cr. hrs.
SPAN 401 Advanced Spanish Communication 3 cr. hrs.
Directed Electives: 15 cr. hrs.
Select 6 credits from:
SPAN 341 Spanish Civilization to 1800 3 cr. hrs.
SPAN 342 Spanish Civilization 1800 to Present 3 cr. hrs.
SPAN 345 Latin American Civilization to 1800 3 cr. hrs.
SPAN 345 Latin American Civilization 1800 to Present 3 cr. hrs.
MODL 376 Mexico: A Cultural Experience 3 cr. hrs.
Select 6 credits from:
SPAN 351 Survey of Spanish Literature-Siglo de Oro 3 cr. hrs.
SPAN 352 Survey of Spanish Literature-Generation of 1898 to Present 3 cr. hrs.
SPAN 355 Survey of Latin American Literature-Conquest to Independence 3 cr. hrs.
SPAN 356 Survey of Latin American Literature-Independence to Present 3 cr. hrs.
Select 3 credits from:
SPAN 452 Advanced Spanish Literature 3 cr. hrs.
SPAN 455 Advanced Latin American Literature 3 cr. hrs.
SPAN 490 Readings in Spanish 1-3
MODL 379 Internship in Modern Language 2-3
Spanish Option-Education
Complete Spanish Major Liberal Arts Option program above Required supporting courses not part of major: 5 cr. hrs.
SPAN 350 Spanish Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

French Minor: 22 Total Credits
French Minor-Liberal Arts Required Courses: 19 cr. hrs.
FREN 102 Beginning French II 4 cr. hr.
FREN 201 Intermediate French I 3 cr. hrs.
FREN 202 Intermediate French II 3 cr. hrs.
FREN 301 Conversation and Composition I 3 cr. hrs.
FREN 302 Conversation and Composition II 3 cr. hrs.
FREN 401 Advanced French Communication 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select 3 cr. hrscredits from:
FREN 341 French Civilization 3 cr. hrs.
FREN 342 Modern French and Francophone Cultures 3 cr. hrs.
FREN 351 Survey of French Literature to 1800 3 cr. hrs.
FREN 352 Survey of French Literature 1800 to Present 3 cr. hrs.
MODL 379 Internship in Modern Language 2-3
French Minor-Education
Complete French Minor Liberal Arts program (must include 341 or 342)
Required courses not part of minor: 5 cr. hrs.
FREN 350 French Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

German Minor: 22 Total Credits
German Minor-Liberal Arts
Required Courses: 19 cr. hrs.
GERM 102 Beginning German II 4 cr. hr.
GERM 201 Intermediate German I 3 cr. hrs.
GERM 202 Intermediate German II 3 cr. hrs.
GERM 301 Conversation and Composition I 3 cr. hrs.
GERM 302 Conversation and Composition II 3 cr. hrs.
GERM 401 Advanced German Communication 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select 3 cr. hrscredits from:
GERM 275 Business German 3 cr. hrs.
GERM 315 German Classic and Modern Film 3 cr. hrs.
GERM 341 German Civilization 3 cr. hrs.
GERM 342 Modern German-speaking Cultures 3 cr. hrs.
GERM 351 Survey of German Literature to Classicism 3 cr. hrs.
GERM 352 Survey of German Literature from Classicism to Present 3 cr. hrs.
MODL 379 Internship in Modern Language 2-3

German Minor-Education
Complete German minor program
(must include 341 or 342)
Required supporting courses not part of minor: 5 cr. hrs.
GERM 350 German Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

Spanish Minor: 22 Total Credits
Spanish Minor-Liberal Arts
Required Courses: 19 cr. hrs.
SPAN 102 Beginning Spanish I 4 cr. hr.
SPAN 201 Intermediate Spanish I 3 cr. hrs.
SPAN 202 Intermediate Spanish II 3 cr. hrs.
SPAN 301 Conversation and Composition I 3 cr. hrs.
SPAN 302 Conversation and Composition II 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select 3 cr. hrs credits from:
SPAN 341 Spanish Civilization to 1800 3 cr. hrs.
SPAN 342 Spanish Civilization 1800 to Present 3 cr. hrs.
SPAN 345 Latin American Civilization to 1800 3 cr. hrs.
SPAN 345 Latin American Civilization 1800 to Present 3 cr. hrs.
SPAN 351 Survey of Spanish Literature-Siglo de Oro 3 cr. hrs.
SPAN 352 Survey of Spanish Literature-Generation of 1898 to present 3 cr. hrs.
SPAN 355 Survey of Latin American Literature-Conquest to independence 3 cr. hrs.
SPAN 356 Survey of Latin American Literature-Independence to present 3 cr. hrs.
MODL 376 Mexico: A Cultural Experience 3 cr. hrs.
MODL 379 Internship in Modern Language 2-3
SPAN 401 Advanced Spanish Communication 3 cr. hrs.

Spanish Minor-Education
Complete Spanish Minor Liberal Arts program
(must include 401 and 341, 342, 345, 346 or 376)
Required supporting courses not part of minor: 5 cr. hrs.
SPAN 350 Spanish Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

Music (MUS/MUSE/MUSA)
Department of Music
College of Arts and Sciences
B46 Kleinpell Fine Arts Building
(715) 425-3183
www.uwrf.edu/music/welcome.html

J. Michael Roy-Chair, Carolyn Britton, A. Grace Caijuiat, Hilree Hamilton, David Milne, Sarah Parks, Lillian Tan, Kristin Tjornehoj

The Department of Music offers majors leading to the degrees of Bachelor of Music Education
(B.M.E.), Bachelor of Arts (B.A.) or Bachelor of Science (B.S.). In the B.M.E. degree program, students may elect either a Choral/General Music (K-12) emphasis (includes a piano-vocal option) or an Instrumental/General Music (K-12) emphasis. Choices in the B.A. or B.S. degrees include majors in either Liberal Arts or Music-Broad Area. The Music Education and Music-Broad Area majors require no minor. The Liberal Arts major requires a minor or double major. The B.M.E. degree is designed to train and certify public school music teachers, whereas, the B.A. and B.S. degrees do not provide teacher certification but are designed for those students seeking admittance to a professional graduate school or another music related career.

The department also offers a Music Minor (non-teaching) and a Musical Theatre Minor. All applicants for admission to degree programs in music must satisfactorily complete a performance audition. Audition requirements for all performance areas are available from the Music Department. In addition to the performance audition, all transfer applicants must take a music theory and history placement exam. The results of the exam will determine the appropriate course levels. Music students should consult the department handbook, which clarifies course requirements and provides additional pertinent information.

The University of Wisconsin-River Falls is an accredited institutional member of the National Association of Schools of Music.

BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Music Education Major

Major Requirements 69 Total Credits
Requirements: 36 cr. hrs.
MUS 130 Music Theory and Ear Training I 4 cr. hr.
MUS 131 Music Theory and Ear Training II 4 cr. hr.
MUS 230 Music Theory and Ear Training III 4 cr. hr.
MUS 231 Music Theory and Ear Training IV 4 cr. hr.
MUS 234 Music History and Literature I (writing intensive) 4 cr. hr.
MUS 235 Music History and Literature II (writing intensive) 4 cr. hr.
MUS 240 Piano Proficiency - Examination: MUS 140 (Class Piano) 0 must be taken until 240 is passed; 140 and 240 credits are not counted toward music major.
MUS 333 20th Century Music 3 cr. hrs.
MUS 351 Music Education I 3 cr. hrs.
MUS 352 Music Education II 3 cr. hrs.
MUS 491 Senior Recital 0
MUS 200+ Any Music Course 200 and above 3 cr. hrs.
Pianists must take MUS 440: Piano Pedagogy

Required Courses for Choral/General Certification: 33 cr. hrs. MUSA 127 Applied Voice-Pianists may substitute 3 cr. of Applied Piano125 (2 per semester) 8
MUSA 327 Applied Voice (upper level)-Pianists may substitute 3 cr. hrs of Applied Piano 325 (2 per semester) 6
MUSE 108 Concert Choir (required each semester)
MUS 102 Class Guitar 1 cr. hr.
MUS 247 Diction I: IPA and Italian 1 cr. hr.
MUS 248 Diction II: German and French 1 cr. hr.
MUS 341 Vocal and Choral Pedagogy 3 cr. hrs.
MUS 342 Conducting 2 cr. hrs.
MUS 344 Choral Conducting 2 cr. hrs.
MUS 331 Choral Composition and Arranging 3 cr. hrs.
MUS 433 Choral Literature 3 cr. hrs.
MUS 340 Opera Techniques 3 cr. hrs.
Required Courses for Instrumental/General Certification: 33 cr. hrs.
MUSA 100 level Applied-credits must be in the same area (2 per semester) 8
MUSA 300 level Applied-upper leve-credits must be in the same area (2 per semester) 6
MUSE 111 University-Community Orchestra
or MUSE 113 Wind Ensemble (large ensemble required each semester)
MUS 102 Class Guitar 1 cr. hr.
MUS 103 Class Voice 1 cr. hr.
MUS 141 String Techniques 1 cr. hr.
MUS 241 Woodwind Techniques I 1 cr. hr.
MUS 242 Woodwind Techniques II 1 cr. hr.
MUS 243 Brass Techniques I 1 cr. hr.
MUS 244 Brass Techniques II 1 cr. hr.
MUS 245 Percussion Techniques I 1 cr. hr.
MUS 246 Percussion Techniques II 1 cr. hr.
MUS 342 Conducting 2 cr. hrs.
MUS 343 Instrumental Conducting 2 cr. hrs.
MUS 330 Orchestration 3 cr. hrs.
MUS 431 Instrumental Literature 3 cr. hrs.
Required for Teacher Certification: 28 cr. hrs.
(not counted in major total)
Choral/General or Instrumental/General (courses to be taken in the College of Education)
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 212 Educational Psychology: Middle and Secondary Education 5
TED 420 School and Society 3 cr. hrs.
TED 422 Content Area Literacy 3 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.
TED 475 Student Teaching 12 cr. hrs.

Music Major - Liberal Arts (minor required): 46 Total Credits
Requirements: 35 cr. hrs.
MUS 130 Music Theory and Ear Training I 4 cr. hr.
MUS 131 Music Theory and Ear Training II 4 cr. hr.
MUS 230 Music Theory and Ear Training III 4 cr. hr.
MUS 231 Music Theory and Ear Training IV 4 cr. hr.
MUS 234 Music History and Literature I (writing intensive) 4 cr. hr.
MUS 235 Music History and Literature II (writing intensive) 4 cr. hr.
MUS 333 20th Century Music 3 cr. hrs.
MUSA 100 level Applied Music-credits must be in the same area. 4 cr. hr.
MUSE Music Ensembles 4 cr. hr.
Directed Electives: 11 cr. hrs.
MUSA or MUSE Performance credits (Applied Music or Ensembles) 4 - 6 Music Pedagogy,
Techniques Course(s) or Academic Music course 200 level and above 4 - 6

Music-Broad Area Major: 64 Total Credits
Requirements: 36 cr. hrs. MUS 130 Music Theory and Ear Training I 4 MUS 131 Music Theory and
Ear Training II 4 MUS 230 Music Theory and Ear Training III 4 MUS 231 Music Theory and Ear
Training IV 4 MUS 234 Music History and Literature I (writing intensive) 4 MUS 235 Music History
and Literature II (writing intensive) 4 MUS 240 Piano Proficiency - Examination: MUS 140 (Class Piano) 0 must be taken until 240 is passed; 140 and 240 credits are not counted toward music major.

MUS 333 20th Century Music 3 cr. hrs.

MUSA 100 level Applied credits must be in the same area (2 per semester) 8

MUSA 300 level Applied-upper level credits must be in the same area (2 per semester) 8

MUSE 108 Concert Choir (1 cr.)
or MUSE 111 University-Community Orchestra (1 cr.)
or MUSE 113 Symphonic Band (1 cr.) to total 4 cr. hr.

MUSE Any Ensemble to total 4 cr. hr.

MUS 491 Senior Recital 1 cr. hr.

MUS 330 Orchestration
or MUS 331 Choral Composition and Arranging 3 cr. hrs.

MUS 200 + Any Music Courses 200 level and above 3 cr. hrs.

Music Minor: 24 Total Credits

Required Courses: 16 cr. hrs.
MUS 130 Music Theory and Ear Training I 4 cr. hr.
MUS 131 Music Theory and Ear Training II 4 cr. hr.
MUS 234 Music History and Literature I (writing intensive) (can be double counted in Gen. Ed.) 4 cr. hr.
MUS 235 Music History and Literature II (writing intensive) 4 cr. hr.

Directed Electives: 8 cr. hrs.
MUS Choose from the areas of music history, music theory, jazz, composition, piano pedagogy, or applied.

Musical Theatre

Interdisciplinary

The minor in Musical Theatre, offered as a collaborative effort between the departments of Speech Communication and Theatre Arts, Music, and Health and Human Performance (dance), is designed to provide students an opportunity to gain formal training. It includes courses in music theory and performance, dance styles, and stage movement, as well as additional courses in theatrical performance, production, and design, with special consideration to their application in creation of and performance in musical production. This minor is available to all students, including music and speech (theatre emphasis) majors and minors.

Musical Theatre Minor: 24 Total Credits

Required Courses: 18 cr. hrs.
MUS 103 Class Voice 1 cr. hr.
MUS 130 Music Theory and Ear Training I 4 cr. hr.
MUS 131 Music Theory and Ear Training II 4 cr. hr.
MUS 225 Voice for the Actor 1 cr. hr.
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.
SCTA 225 Musical Theatre Performance 3 cr. hrs.
SCTA 375 Theatre Practicum: Production 1 cr. hr.
SCTA 376 Theatre Practicum: Design and Technology 1 cr. hr.

Directed Electives: 2 cr. hrs.
Outdoor Education
Department of Health and Human Performance
College of Education and Professional Studies

111 Karges Center Phone Number
(715) 425-3705
Web Site http://www.uwrf.edu/hhp/

Chair-Connie Foster, Debra Allyn, Betsy Barrett, Richard Bowen, Kevin Bullis, Gary Eloranta, Patti Ford, Steve Freeman, Tom Journell, Douglas Naylor, John O’Grady, Faye Perkins, Robert Ritzer, Susan Tarr, Jim Theis, Karla Zhe

Outdoor Education Minor: 24 Total Credits
Required Courses: 13-16 cr. hrs.
PED 201 Outdoor Education Concepts and Skills-Summer 3 cr. hrs.
PED 202 Outdoor Education Concepts and Skills-Winter 3 cr. hrs.
PED 371 Recreation Field Study 1-4 cr. hr.
PED/ESM 301 Foundation of Outdoor Leadership 3 cr. hrs.
SFED 200 First Aid and Basic Life Support 3 cr. hrs.
Electives 8-11 cr. hrs.
ESM 300 Environmental Education 3 cr. hrs.
or GEOG 300 Environmental Education
ESM 307 Multicultural Perspectives in the Environment 3 cr. hrs.
ESM 365 Interpretive Services 3 cr. hrs.
GEOL 269 Environmental Geology 2 cr. hrs.
PED 109 Recreational Climbing 1 cr. hr.
PED 118 Scuba .5
PED 128 Fundamentals of Ice Skating .5
PED 145 Lifeguard Training 2 cr. hrs.
PED 147 Water Safety Instructor 2 cr. hrs.
PED 255 Techniques in Sport Fishing 1 cr. hr.
PED 300 Adapted Physical Education 2 cr. hrs.
PED 389 Special Topics in Physical Education 3-5
PED 450 Organization and Administration of Physical Education and Athletics 2 cr. hrs.
POLS 355 Environmental Law 3 cr. hrs.
SOCI 230 Sociology of Sport and Leisure 3 cr. hrs.
TED 312 Techniques in Elementary Education: Science 4 cr. hr.

Philosophy (PHIL)
Department of History and Philosophy
College of Arts and Sciences

355 Kleinpell Fine Arts Building
(715) 425-3164
Web Site http://www.uwrf.edu/history

History: John Buschen-Chair, Betty Bergland, Kurt Leichtle, John Ness, Edward Peterson and David Riggs
Philosophy: Imtiaz Moosa and David Peters

Philosophical inquiry aims at uncovering, analyzing, and evaluating the fundamental values and assumptions implicit in various human activities and practices such as science, the arts, religion, morality, and social and political institutions. Its ultimate goal is to develop a coherent view of the world and our place in it. Philosophy focuses on sharpening the ability to analyze, reason, and write effectively.

Philosophy Minor: 24 Total Credits
Required Courses: 9 cr. hrs.
PHIL 221 Ancient Philosophy 3 cr. hrs.
PHIL 223 Origins of Modern Philosophy 3 cr. hrs.
PHIL 230 Logical Reasoning 3 cr. hrs.
Directed Electives: 15 cr. hrs.
Five additional PHIL courses

Physics (PHYS)
Department of Physics
College of Arts and Sciences

125 Centennial Science Hall
(715) 425-3235
http://www.uwrf.edu/physics/
General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Physics Major-Liberal Arts
Core Requirements: 25 cr. hrs.
The prerequisite courses for all courses required in the physics major must be passed with a grade of C or better
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 204 Intermediate Physics Laboratory 1 cr. hr.
PHYS 161 General Physics I 4 cr. hrs.
PHYS 162 General Physics II 4 cr. hrs.
PHYS 264 General Physics III 4 cr. hrs.
PHYS 301 Advanced Physics Laboratory I (writing intensive) 3 cr. hrs. PHYS 302 Advanced Physics Laboratory II (writing intensive) 3 cr. hrs.
PHYS 311 Electronics: Circuits and Devices 3 cr. hrs.
PHYS 485 Seminar (writing intensive) 1cr. hr.
Required Supporting Courses: 20 cr. hrs.
MATH 166 Calculus I 4 cr. hrs.
MATH 167 Calculus II 4 cr. hrs.
MATH 331 Differential Equations 3 cr. hrs.
PHYS 211 Scientific Programming 3 cr. hrs.
or CPTS 162 Programming II or 3 cr. hrs.
PHYS 361 Mathematics of Physics and Engineering I 3 cr. hrs.
PHYS 362 Mathematics of Physics and Engineering II 3 cr. hrs.
Option I 50 Total Credits
Recommended as preparation for graduate studies in physics or for industrial research.
Physics Major Core 25 cr. hrs.
Directed Electives in Physics-Choose from courses below: 25 cr. hrs.
Option II 36 Total Credits
Recommended for students wanting maximum flexibility for study in other areas

Physics Major-Secondary Education
Physics Major Core 25 cr. hrs.
Directed Electives in Physics-Choose from courses below: 11 cr. hrs.
Directed Electives in Physics
PHYS 279 Cooperative Education and Internship 1 cr. hr.
PHYS 312 Electronics: Linear Integrated Circuits 3 cr. hrs.
or PHYS 313 Electronics: Digital Circuit Theory and Applications
PHYS 318 Astrophysics 3 cr. hrs.
PHYS 321 Physical Acoustics I 2 cr. hrs.
PHYS 322 Physical Acoustics II 2 cr. hrs.
PHYS 379 Cooperative Education and Internship 3 cr. hrs.
PHYS 415 Thermodynamics 3 cr. hrs.
PHYS 420 Optics 4 cr. hr.
PHYS 426 Nuclear and Particle Physics 4 cr. hr.
PHYS 427 Condensed Matter Physics 4 cr. hr.
PHYS 441 Classical Mechanics 4 cr. hr.
PHYS 442 Electricity and Magnetism 4 cr. hr.
PHYS 465 Quantum Mechanics 3 cr. hrs.
Applied Option 50 Total Credits
Recommended as preparation for a career in an industrial or government laboratory, or for graduate study in Applied Physics, Electronics, Engineering Physics, and Geophysics.
Core Requirements 25 cr. hrs.
Directed Electives in Physics 25 cr. hrs.
PHYS 250 Statics 3 cr. hrs.
PHYS 252 Dynamics 3 cr. hrs.
PHYS 254 Deformable Body Mechanics 3 cr. hrs.
PHYS 312 Electronics: Linear Integrated Circuits 3 cr. hrs.
PHYS 313 Electronics: Digital Circuit Theory and Applications 3 cr. hrs.
PHYS 361 Mathematics of Physics and Engineering I 3 cr. hrs.
PHYS 362 Mathematics of Physics and Engineering II 3 cr. hrs.
Choose an internship and/or advanced courses of an applied nature elected 4 from Physics, Chemistry, or Geology.

Physics Major - Dual Degree
Major Requirements 36 Total Credits
Core Requirements: 25 cr. hrs.
PHYS 331 Curriculum Physics 3 cr. hrs.
Directed Electives in Physics 8 cr. hrs.
As listed for Liberal Arts excluding PHYS 279 and 379 Internship courses This major is awarded jointly with a B.S. in engineering after the student has successfully completed a three-year program at UW-River Falls with a minimum grade point average of 3.0 and a two-year program at either UW-Madison or the University of Minnesota.
Required Courses in Physics at UW-River Falls: 10 cr. hrs.
PHYS 101 General Physics Laboratory I (meets Gen Ed req) 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I (meets Gen Ed req) 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
Required Supporting Courses: 30 cr. hrs.
MATH 166 Calculus I (meets Gen Ed req) 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 331 Differential Equations
PHYS 211 Scientific Programming 3 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
Directed Electives: 20 cr. hrs.
PHYS 250 Statics 3 cr. hrs.
PHYS 252 Dynamics 3 cr. hrs.
PHYS 254 Deformable Body Mechanics 3 cr. hrs.
PHYS 264 General Physics III 4 cr. hr.
PHYS 301 Advanced Physics Laboratory I 3 cr. hrs.
PHYS 311 Electronics: Circuits and Devices 3 cr. hrs.
PHYS 361 Mathematics of Physics and Engineering I 3 cr. hrs.
PHYS 362 Mathematics of Physics and Engineering II 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
MATH 346 Numerical Analysis I 3 cr. hrs.
Credits Transferred from Engineering School 20 cr. hrs.

Minor in Physics - Liberal Arts or Education: 24 Total Credits
Required Courses 14 cr. hrs.
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 264 General Physics III 4 cr. hr.
Required Supporting Courses: 11 cr. hrs.
(may be taken under Gen Ed or under Major)
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
PHYS 361 Mathematics of Physics and Engineering I 3 cr. hrs.
or MATH 266 Calculus III
Directed Electives for Both Minors: 10 cr. hrs.
PHYS 204 Intermediate Physics Laboratory (writing intensive) 1 cr. hr.
PHYS 301 Advanced Physics Laboratory I (writing intensive) 3 cr. hrs.
PHYS 302 Advanced Physics Laboratory II (writing intensive) 3 cr. hrs.
PHYS 311 Electronics: Circuits and Devices 3 cr. hrs.
PHYS 312 Electronics: Linear Integrated Circuits 3 cr. hrs.
or PHYS 313 Electronics: Digital Circuit Theory and Applications
PHYS 318 Astrophysics 3 cr. hrs.
PHYS 321 Physical Acoustics I 2 cr. hrs.
PHYS 322 Physical Acoustics II 2 cr. hrs.
PHYS 415 Thermodynamics 3 cr. hrs.
PHYS 420 Optics 4 cr. hr.
PHYS 426 Nuclear and Particle Physics 4 cr. hr.
PHYS 427 Condensed Matter Physics 4 cr. hr.
PHYS 441 Classical Mechanics 4 cr. hr.
PHYS 442 Electricity and Magnetism 4 cr. hr.
PHYS 465 Quantum Mechanics 3 cr. hrs.
Additional Choice for Directed Elective for Secondary Education Minor PHYS 331 Curriculum Physics 3 cr. hrs.

Pre-Engineering: 68 Total Credits
Required Courses: 55 cr. hrs.
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 211 Scientific Programming 3 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 331 Differential Equations 3 cr. hrs.
ENGL 111 Freshman English I 3 cr. hrs.
ENGL 112 Freshman English II 3 cr. hrs.
ECON 201 Principles of Microeconomics 3 cr. hrs.
ECON 202 Principles of Macroeconomics 3 cr. hrs.
SCTA 101 Fundamentals of Oral Communication 3 cr. hrs.
Electives depending on final engineering major: 13 cr. hrs.
select from MATH, PHYS, CPTS, CHEM, GENG, BIOL, GEOL

Political Science (POLS)
Department of Political Science
College of Arts and Sciences

Kleinpell Fine Arts Building
(715) 425-3318/3798
Web site: www.uwrf.edu/polsci

Tracey Gladstone-Sovell-Chair, Davida Alperin, Wesley Chapin, Jan Hillard.

The Political Science Department's requirements for a major or minor in liberal arts and in education are designed to expose students to the breadth of subject matter contained in the discipline of political science. The department has also outlined programs of study designed to prepare students for careers in the public sector, including foreign service, federal, state and local government. Information for students interested in pre-law is listed on page 40. Program recommendations focusing on public sector employment and foreign service are available from the department. Broad Field Social Studies Major: Political Science is one of the subject fields comprising the Broad Field Social Studies major. For information about this major, see page 163. Social Science Minor: Political Science is one of the subject fields comprising the minor in Social Science. For information about this minor, see page 162.

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Political Science Major: 36 Total Credits
Required Courses: 9 cr. hrs.
POLS 114 American National, State and Local Government 3 cr. hrs.
POLS 200 Political Analysis 3 cr. hrs.
POLS 480 Seminar in Political Science (writing intensive) 3 cr. hrs.
Directed Electives: 15 cr. hrs.
Select one course in each of the following five fields.
1. American Politics 3 cr. hrs.
   Political Processes
   POLS 225 Introduction to Public Administration
   POLS 256 Public Policymaking Political Institutions
   POLS 311 American Political Parties and Elections
   POLS 326 The American Presidency: The Office and its Powers
   POLS 327 Congressional Politics State/Local Government
   POLS 253 State and Local Politics
   POLS 322 Politics of American Cities
2. International Relations 3 cr. hrs.
POLS 260 Introduction to International Relations
3. Comparative Politics 3 cr. hrs.
POLS 245 Introduction to Comparative Politics
4. Political Philosophy
POLS 230 Contemporary Political Ideologies 3 cr. hrs.
POLS 308 Western Political Thought: The Renaissance to Marx
POLS 309 Western Political Thought: Nietzsche to the 20th Century
POLS 310 History of American Political Thought
5. Political Behavior 3 cr. hrs.
POLS 212 The Politics of Equality and Inequality in the United States POLS 314 Women and Politics
POLS 320 Journalism and Public Opinion
POLS 321 Political Participation
Electives: 12 cr. hrs.
Any POLS course, excluding courses taken to fulfill required or directed electives.
Restrictions: Students may apply a maximum of 6 credits of POLS 379 "Internship in Political Science" toward the elective section of the major. Students majoring in Political Science must take a minimum of 15 out of the total 36 credits for the major in courses numbered at the 300 level or above, excluding credits taken for POLS 379 Internship in Political Science.

Political Science Minor: 24 Total Credits
Required Courses: 3 cr. hrs.
POLS 114 American National, State and Local Government 3 cr. hrs.
Directed Electives: 12 cr. hrs.
Select one course from four of the following five fields:
1. American Politics 3 cr. hrs
Political Processes
POLS 225 Introduction to Public Administration
POLS 256 Public Policymaking Political Institutions
POLS 311 American Political Parties and Elections
POLS 326 The American Presidency: The Office and its Powers
POLS 327 Congressional Politics State/Local Government
POLS 253 State and Local Politics
POLS 322 Politics of American Cities
2. International Relations 3 cr. hrs.
POLS 260 Introduction to International Relations
3. Comparative Politics
POLS 245 Introduction to Comparative Politics 3 cr. hrs.
4. Political Philosophy
POLS 230 Contemporary Political Ideologies 3 cr. hrs.
POLS 308 Western Political Thought: The Renaissance to Marx
POLS 309 Western Political Thought: Nietzsche to the 20th Century
POLS 310 History of American Political Thought
5. Political Behavior 3 cr. hrs.
POLS 212 The Politics of Equality and Inequality
POLS 314 Women and Politics
POLS 320 Journalism and Public Opinion
POLS 321 Political Participation
Electives: 9 cr. hrs.
Any POLS course, excluding any courses taken to fulfill required or directed electives Restrictions: Students may apply a maximum of 3 cr. hrs of POLS 379 Internship in Political Science
toward the elective section of the minor. Students minoring in Political Science must take a minimum of 9 out of the total 24 credits for the minor in courses numbered at the 300 level or above, excluding credits taken for POLS 379 Internship in Political Science.

Broad Field Social Studies Major
For those who wish to teach political science in high school, the required major is the Broad Field Social Studies Major-Political Science Emphasis, see page 163.

Professional and Organizational Communication Department of Speech Communication and Theatre Arts- College of Arts and Sciences

B-24 Kleinpell Fine Arts Building
(715) 425-3971
Web Site: http://www.uwrf.edu/scta/

Margaret M. Swanson-Chair, Suzanne Hagen, Robin Murray, James Pratt, Ronald Snell, Kenneth Stofferahn, Richard Vogel, Barbara L. Werner, James Zimmerman

Professional and Organizational Communication Minor: 25-28 Total Credits
Required Courses 16-19 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 216 Communication in the Interview 3 cr. hrs.
SCTA 316 Organizational Communication 3 cr. hrs.
Choose any combination from the following two to total 3 credits:
SCTA 379 Internship in SCTA 3-4 cr. hr.
SCTA 499 Independent Study/Independent Research 1-3
Directed Electives 9 cr. hrs.
SCTA 106 Interpersonal Communication 3 cr. hrs.
SCTA 111 Argumentation and Decision Making 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SCTA 318 Communication and Leadership 3 cr. hrs.
SCTA 360 Corporate Electronic Communication 3 cr. hrs.
SCTA 416 Communication Training and Development in Organizations 3 cr. hrs.
SCTA 440 Gender Communication 3 cr. hrs.
A research/writing course experience is required in the major or another field; SCTA 284§ Sophomore Seminar or another course approved by the department chair, will satisfy this requirement.
A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.

Professional Writing
Department of English
College of Arts and Sciences

245 Kleinpell Fine Arts Building
(715) 425-3537
Web Site: www.uwrf.edu/english/welcome.html
The Professional Writing Minor Business-Government option provides study and practice in the spectrum of communication from graphic design to computer literacy and emphasizes training useful in business, industry, and government. The minor is not recommended for English Education majors. Students selecting this minor are advised to complete an English internship, ENGL 379.

The Professional Writing Minor Creative Writing option serves as a foundation for general publication or in-house publication in large businesses and also for "professional writing" in its traditional sense: "free-lance" writing as a primary or supplemental source of income or as an avocation. The minor is not recommended for English Education majors. Students selecting this minor are advised to complete an English internship, ENGL 379.

Professional Writing Business Government Option 23-24 Total Credits
Required Courses: 5-9 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 266 Business Writing 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.

English Majors may not double count ENGL 251, but must take an additional appropriate course selected from ENGL 361, 370, 373, JOUR 241, 245, 269, 360, 363, or SCTA 334.

Directed electives: 14-15 cr. hrs.
A. Select two: 5-6 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 303 Advertising Design II 3 cr. hrs.
ART 335 Studio - Photography 3 cr. hrs.
JOUR 260 Introduction to Public Relations 2 cr. hrs.
JOUR 265 Beginning Photography 3 cr. hrs.
JOUR 266 Photojournalism 3 cr. hrs.
JOUR 269 Feature Writing for Magazines and Newspapers 2 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 360 Opinion Writing 3 cr. hrs.
JOUR 362 Advertising Principles 2 cr. hrs.
CPTS 105 Microcomputer Applications 2 cr. hrs.
ENGL 379 Internship 2-3

Only one of the beginning photography courses, JOUR 265 or ART 235, may be taken for credit.
B. Select two: 6 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 370 Writing Nonfiction 3 cr. hrs.
ENGL 372 Practicum: Peer Tutoring and Writing Instruction 3 cr. hrs.
SCTA 116 Business and Professional Communication 3 cr. hrs.
SCTA 211 Public Speaking 3 cr. hrs.
SCTA 216 Communication in the Interview 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
SCTA 316 Organizational Comm 3 cr. hrs.
C. Select one additional course from any of the above. 3 cr. hrs.

Professional Writing-Creative Writing Option 24 Total Credits
Required Courses: 9 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 262 Creative Writing 3 cr. hrs.
English Majors may not double count ENGL 251, but must take an additional appropriate course selected from ENGL 361, 370, 373, JOUR 241, 245, 269, 360, 363, or SCTA 334; for ENGL 253, select another genre course. Directed electives: 15 cr. hrs.
A. Select two: 6 cr. hrs.
ENGL 368 Writing Poetry 3 cr. hrs.
ENGL 369 Writing Fiction 3 cr. hrs.
ENGL 370 Writing Nonfiction 3 cr. hrs.
ENGL 482 Writing Seminar in Fiction and Poetry 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
B. Select one genre course: 3 cr. hrs.
ENGL 231 The Short Story 3 cr. hrs.
ENGL 232 Contemporary Drama 3 cr. hrs.
ENGL 233 Introduction to Poetry 3 cr. hrs.
ENGL 234 Modern Novels 3 cr. hrs.
ENGL 250 Children's Literature 3 cr. hrs.
ENGL 355 Literature for Adolescents 3 cr. hrs.
C. Select two:
Only one of the beginning photography courses, 6 cr. hrs. JOUR 265 and ART 235, may be taken for credit.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 335 Studio - Photography 3 cr. hrs.
JOUR 245 Writing for Film and Television 3 cr. hrs.
JOUR 265 Beginning Photography 3 cr. hrs.
JOUR 266 Photojournalism 3 cr. hrs.
JOUR 269 Feature Writing for Magazines and Newspapers 2 cr. hrs.
JOUR 360 Opinion Writing 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
SCTA 151 Broadcast Performance I 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
SCTA 351 Broadcast Performance II 3 cr. hrs.

Psychology (PSYC)
Department of Psychology
College of Arts and Sciences

151 Centennial Science Hall
(715) 425-3306
http://www.uwrf.edu/psych/welcome.html

Bradley Caskey-Chair, Lisa Isenberg, Cynthia Kernahan, Daniel Linwick, Virgil Nylander, Barbara Rebuhn, Michael Reich, Richard Seefeldt, Travis Tubré

The mission of the Department of Psychology's undergraduate program is: (1) to provide students an understanding of the content and methods of psychology, (2) to prepare students for a lifetime of learning and thinking by cultivating their intellectual skills, and (3) to promote personal characteristics that are consistent with high ethical standards and a sensitivity to issues of culture, ethnicity, and gender. The department's curriculum strives to prepare students both for graduate school and the world of work by instilling in students a basic science orientation, and by offering
applied courses and experiences. Psychology is one of the subject fields comprising the Broad Field Social Studies major. For information about this major, see page 163.

General Education Requirements as listed on pages pages 34-35 with the following exceptions: General Psychology and Behavioral Statistics are required of all majors and minors but do not count toward the required hours if used to fulfill general education requirements.

Psychology Major: 36 Total Credits
Core Requirements: 19 cr. hrs.
PSYC 101 General Psychology (credits can be counted in general education) (0 or 3)
PSYC 201 Behavioral Statistics (credits can be counted in general education) (0 or 3)
PSYC 110 Psychology Colloquium I 1 cr. hr.
PSYC 205 Research Methods (writing intensive) 3 cr. hrs.
PSYC 265 Social Psychology 3 cr. hrs.
PSYC 305 Learning and Motivation 3 cr. hrs.
PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
PSYC 355 Physiological Psychology 3 cr. hrs.
PSYC 401 History and Systems of Psychology 3 cr. hrs.
Required Courses: 9 cr. hrs.
Choose one of the following two courses: PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. hrs.
PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. hrs.
Choose one of the following two courses:
PSYC 310 Memory and Thinking 3 cr. hrs.
PSYC 350 Sensation and Perception 3 cr. hrs.
Choose one of the following two courses:
PSYC 320 Psychology of Personality 3 cr. hrs.
PSYC 325 Abnormal Psychology 3 cr. hrs.
Directed Electives: 8 cr. hrs.
May be any courses in psychology. All psychology majors are required to participate in the departmental assessment of the psychology major. This involves keeping a portfolio, taking surveys, and a general psychology achievement test in their first and last year in the program.

Psychology Minor: 24 Total Credits
Required Courses: (3 or 9 cr. hrs.)
PSYC 101 General Psychology (credits can be counted in general education) (0 or 3) PSYC 201 Behavioral Statistics (credits can be counted in general education) (0 or 3) PSYC 205 Research Methods (writing intensive) or PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
Electives: Seven additional courses in Psychology to total 24 credits (15 or 19) If Psychology 101 and/or 201 is not used to fulfill general education requirements, they can count toward the required 24 minor hours. Sociology majors with a minor in psychology who have taken SOCI 300, Research Methods, may substitute a psychology course for the PSYC 205 or PSYC 315 requirement. The recommended sequence for psychology majors and minors is 101, 201 and 205.

Science, Broad Field
Interdisciplinary Program
125 Centennial Science Hall
(715) 425-3196
Web Site: www.uwrf.edu/bfs/
The Broad Field Sciences Programs are monitored by a committee formed of representatives from the Departments of Biology, Chemistry, Physics, and Plant and Earth Science. Students choosing one of these programs will typically be assigned an advisor from one of these departments. The Broad Field Science Programs are interdepartmental programs tailored to various interdisciplinary niches in the sciences. These programs are the equivalent of a major and a minor. A student selecting one of these programs is not required to have an additional minor. Two of these programs lead to certification in secondary or middle school education. Students interested in certification in those programs should consult the Secondary Education Handbook for Undergraduates (http://www.uwrf.edu/college-of-education/Handbooks.htm) for the detailed requirements for various levels of certification in Wisconsin and Minnesota.

General Education Requirements
Arts and Sciences as listed on pages 34-35;
Agriculture, Food and Environmental Sciences as listed on pages 26-27;
and Education and Professional Studies as listed on pages 47 48.
The General Education Science Requirement will be fulfilled by taking any of the following majors.

Broad Field Science Major - Liberal Arts: 60 Total Credits
Required Courses: 41 cr. hrs.
BIOL 150 General Biology 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
GEOL 101 Introductory Geology 3 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 150 Historical Geology 4 cr. hr.
GEOL 202 Oceanography 2 cr. hrs.
ISCI 497 Interdisciplinary Capstone in Science 2 cr. hrs.
Choose either sequence A or B below:
A. PHYS 151 General Physics I 4 cr. hr.
PHYS 152 General Physics II 4 cr. hr.
PHYS 156 General Physics Laboratory I 1 cr. hr.
PHYS 157 General Physics Laboratory II 1 cr. hr.
B. PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
Directed Electives: 13-16 cr. hrs.
(select two areas)
BIOL 240 Cell Biology 3 cr. hrs.
BIOL 310 Identification of Plants 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
or CHEM 231 Organic Chemistry I
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
GEOL 230 Mineralogy 4 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hr.
PHYS 264 General Physics III 4 cr. hr.
PHYS 300 level or higher, excluding 361 and 362 3 cr. hrs.
Electives: Select from BIOL, CHEM, GEOL, PHYS 3-6 cr. hrs.

Broad Field Science Major - Education: Broad Science Certification
This program leads to certification for middle school general science through 9th grade general science. Completion of the middle school coursework in TED is required. Additional certification at the secondary school level is available in Wisconsin for any of the four science areas with at least 15 semester hours. The equivalent licensure in Minnesota expects equal amounts of life science, earth science, and physical science.

Broad Field Science Major - Education: Broad Science Certification 63 Total Credits
Requirements as listed for the Broad Field Science Major - Liberal Arts 60 ESM 300 Environmental Education 3 cr. hrs.
or GEOG 300 Environmental Education or 3 cr. hrs.
This program leads to certification for secondary school chemistry, physics, and physical science. Minnesota requires middle school licensure as well as secondary.

Broad Field Science Major - Education: Physical Science Certification 63 Total Credits
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
CHEM 230 General Organic Chemistry 3 cr. hrs.
or CHEM 231 Organic Chemistry I
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 264 General Physics III 4 cr. hr.
PHYS 311 Electronics: Circuits and Devices 3 cr. hrs.
PHYS 331 Curriculum Physics 3 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
ESM 300 Environmental Education 3 cr. hrs.
or GEOG 300 Environmental Education or 3 cr. hrs.
ISCI 497 Interdisciplinary Capstone in Science 2 cr. hrs.
Directed Electives 12 cr. hrs.
CHEM 232 Organic Chemistry II 4 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 340 Physical Chemistry of Biological Systems 3 cr. hrs.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 422 Advanced Inorganic Chemistry 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
CHEM 300 level or higher, excluding 361 and 362 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
or PHYS 361 Mathematics of Physics and Engineering

Science, General
Interdisciplinary Program

125 Centennial Science Hall
(715) 425-3196
Web Site: www.uwrf.edu/bfs/

Earl Blodgett-Coordinator

Elementary and middle school teachers are required to take ESM/GEOG 300 Environmental Education as part of the General Education Science requirement. Completion of the General Science Minor will complete the remainder of the science requirement.

General Science Minor for Elementary and Middle School Science Teachers: 29-30 Total Credits
Select all courses from any one area:
Biology 12 cr. hrs.
BIOL 150 General Biology 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
BIOL 253 Human Biology 3 cr. hrs.

Chemistry 12 cr. hrs.
CHEM 101 Elementary Principles of Chemistry 3 cr. hrs.
CHEM 200 Chemistry and the Environment 3 cr. hrs.
CHEM 210 Topics in Consumer Chemistry 3 cr. hrs.
CHEM 220 Chemistry of Life 3 cr. hrs.

Geology 12 cr. hrs.
GEOL 101 Introductory Geology 3 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 150 Historical Geology 4 cr. hr.
GEOL 202 Oceanography 2 cr. hrs.
GEOL 330 Meteorology 2 cr. hrs.

Physics 11 cr. hrs.
PHYS 114 Basic Physics 3 cr. hrs.
PHYS 117 Introductory Astronomy 3 cr. hrs.
PHYS 220 The Science of Light 3 cr. hrs.
PHYS 321 Physical Acoustics I 2 cr. hrs.

Select 6 cr. hrs. from each of the three areas not chosen above, but not GEOL 150 nor 330 nor PHYS 321 18 cr. hrs.
Secondary Education (TED)
Department of Teacher Education
College of Education and Professional Studies

257 Wyman Education Building
(715) 425-3230
Web Site: www.uwrf.edu/college-of-education/

Teri Crotty-Chair, Stephanie Harty, Tim Holleran, Angela Kaiser, Lee Karnowski, DeAn Krey, Mary Lundeberg, Florence Monsour, David Pepi, Margaret Phinney, Geoffrey Scheurman, José E. Vega, So-young Zeon

The degree curricula designed to prepare teachers for the secondary school, grades 9-12, consists of a minimum of 120 semester hours that give the student a broad general education, specialized preparation in one or more academic fields and professional preparation needed for effective teaching. Specific course requirements are listed for each academic department preceding the departmental course descriptions.

General Education Requirements as listed on pages pages 47-48 Coursework included in the professional sequence, major, minor or concentration may not be included in the general education component.

Bachelor of Science in Secondary Education
Professional Requirements: 31-43 Total Credits
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 212 Educational Psychology: Middle and Secondary Ed (writing intensive) 5
Admission to teacher education is required before students can enroll in 420, 422, 423.
TED 420 School and Society (writing intensive) 3 cr. hrs.
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
TED 423 Writing, Speaking and Listening in the Content Area 3 cr. hrs.
Admission to teacher education is required before students can enroll in technique courses.
TED 430-441 Techniques of Middle/Secondary Education 3 cr. hrs.
TED 474 Student Teaching: Secondary 1-12 cr. hrs.
TED 473 Student Teaching: Middle Level 1-6
PSYC 330 The Exceptional Child 3 cr. hrs.

University and DPI General Education Requirements
Academic Specialization: 54-58 Total Credits
Option A - Departmental major and one minor
Option B - Two departmental majors
Option C - Broad Field major

Approved Secondary Education Majors and Minors
Comprehensive Majors:
Art (K-12)
Broad Area/Physical Science
Broad Area Social Studies 1,2 cr. hrs.
English, Broad Area Physical Education (K-12)1
Music (K-12)
Majors:
Agricultural Education 1
Applied Computer Systems
Art
Biology
Chemistry
Communicative Disorders
Earth Science 2
English
Journalism
Mathematics
Modern Language (French, German, Spanish)
Physics
Social Studies 1, 2 cr. hrs.
Speech
Minors: Anthropology 1
English 1
Journalism
Athletic Coaching
French
Mathematics
Biology
General Science
Physics
Chemistry
Geography 1
Political Science 1
Computer Science
German
Spanish
Dance
Health Education
Speech
Earth Science 2
History 1
Sociology 1
Economics 1

1 Cooperatives. Wisconsin law requires that teachers of Economics, social studies and agriculture complete adequate instruction in consumers' cooperatives and cooperative marketing. Students in agriculture can satisfy this requirement by successful completion of AGEC 240 or 355. Students in Economics and social sciences can satisfy this requirement by successful completion of TED 433 or AGEC 240 or 355.

2 If you are interested in teaching Economics, geography, history, political science, psychology or sociology, please see Social Sciences, Broad Area.

Social Science Interdisciplinary

355 Fine Arts
(715) 425-3164
Kurt Leichtle-Coordinator

The minor in Social Science, available for majors in elementary and middle school (6-9) education is a program of study comprised of several social science disciplines: Economics, geography, history, political science and sociology. For information about this minor see the program listing for History.

Social Science Minor: 30 Total Credits
HIST 102 Origins of One World 3 cr. hrs.
HIST 103 U.S. History to 1877 3 cr. hrs.
HIST 104 U.S. History Since 1865 3 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 120 Human Geography 3 cr. hrs.
ECON 100 Modern Economics 3 cr. hrs.
SOCI 100 Introduction to Sociology 3 cr. hrs.
ANTH 100 Introduction to Anthropology 3 cr. hrs.
POLS Any POLS course excluding POLS 114 3 cr. hrs.
PSYC Any PSYC course excluding 101 and 330 3 cr. hrs.

Social Studies, Broad Field
Department of History and Philosophy
College of Arts and Sciences
309 Kleinpell Fine Arts Building
(715) 425-3164

Coordinator-Kurt E. Leichtle

The Broad Field Social Studies (BFSS) degree is the preferred degree for secondary teaching in the area of social studies. This degree offers many options and great versatility. The program requires that the student have a concentration (a major) in one of the social sciences and then additional work in the other social sciences. The concentration gives the degree maximum flexibility if the student does not continue in the field of education.

General Education Requirements as listed on pages 34-35 with the following exceptions:
Social and Behavioral Science:
POLS 114 American, National, State and Local Government
PSYC 101 General Psychology
TED 252 Foundations of Multicultural Education
ESM/GEOL 300 Environmental Education

Professional Secondary Education Requirements: See page 161. 37 Total Credits

Broad Field Social Studies Major: 66-69 Total Credits
Meet major requirements in one of the following: 36-39 cr. hrs. Economics, Geography, History, Political Science, Psychology or Sociology Contact individual departments for program requirements.
Directed Electives: 30 cr. hrs. Any social science other than the concentration 9 Any social science other than the concentration 9 One course in each of the remaining social sciences 12 cr. hrs.
Geography Requirements: 18 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GEOG 401 Senior Colloquium in Geography 2 cr. hrs.
Directed Electives: 6 cr. hrs.
(See Geography Major without a Cartography Minor, p.112)
Electives: 12 cr. hrs.
(See Geography Major without a Cartography Minor, p.112) Distribution: 30 cr. hrs.
Select 30 credits from at least two of the following: Anthropology, Economics, History, Political Science, Psychology, Sociology 9 credits from each of two of the above areas 18 3 cr. hrs
credits from each of four of the above areas 12 cr. hrs.

Social Work (SOWK) College of Education and Professional Studies

203 Wyman Education Building
(715) 425-3655
Web Site http://www.uwrf.edu/social-work/

Ogden Rogers-Program Director, Ruth A. Kalms, Jennifer E. Borup

The four-year curriculum leading to a bachelor's degree in Social Work is listed below. The minimum of 120 semester credits required for graduation provides students with knowledge, values, and skills necessary for the beginning level of generalist social work practice.

General Education Requirements as listed on pages pages 47-48 with the following exceptions:
Social and Behavioral:
ECON 100, POLS 114, PSYC 101 required as supporting courses.
Sciences: BIOL 100 required as supporting course.
Mathematics: PSYC 201 or MATH 226 required as supporting course.
Liberal Arts: BIOL 253 required as a supporting course.

Social Work Major: 54 cr. hrs.
SOWK 150 Introduction to Social Work Services 3 cr. hrs.
SOWK 205 Introduction to Social Work and Social Welfare 3 cr. hrs.
SOWK 215 Human Behavior and Social Environment 3 cr. hrs.
SOWK 250 Use, Abuse, and Addiction 3 cr. hrs.
SOWK 300 Research Methods 3 cr. hrs.
SOWK 324 Theory and Practice of Social Work I 3 cr. hrs.
SOWK 325 Theory and Practice of Social Work II 3 cr. hrs.
SOWK 350 Social Welfare Policy 3 cr. hrs.
SOWK 389 Special Topics in Social Work (2) 6
SOWK 424 Advanced Interviewing and Crisis Intervention 3 cr. hrs.
SOWK 426 Theory and Practice Of Social Work III 3 cr. hrs.
SOWK 472 Social Work Field Instruction (2) 12 cr. hrs.
SOWK 480 Senior Integrative Seminar 3 cr. hrs.
SOWK 481 Integrating Practice and Research 3 cr. hrs.
Required Supporting Courses: 8 cr. hrs.
SOWK 100 Introduction to Sociology 3 cr. hrs.
CPTS 105 Microcomputer Applications 2 cr. hrs.
SOWK 260 Practice with Diverse Populations 3 cr. hrs.
Directed Electives: 3 cr. hrs.
SOCI 218 Deviant Behavior 3 cr. hrs.
SOCI 221 Global Perspectives on Women 3 cr. hrs.
SOCI 315 Sociology of Later Life 3 cr. hrs.
SOCI 323 Sociology of the Family 3 cr. hrs.
SOCI 330 Social Organizations 3 cr. hrs.
SOCI 338 Global Perspectives on Health and Disease 3 cr. hrs.
SOCI 435 Social and Cultural Change 3 cr. hrs.
SOCI 445 Power and Inequality 3 cr. hrs.
CJ 202 Introduction to Criminal Justice 3 cr. hrs.
CJ 320 Juvenile Delinquency 3 cr. hrs.
CJ 322 Criminology 3 cr. hrs.
CJ 430 Trends and Issues in Incarceration 3 cr. hrs.
SCTA 206 Family Communication 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 318 Communication and Leadership 3 cr. hrs.
PSYC 236 Developmental Psychology: childhood and Adolescence 3 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.
PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. hrs.
PSYC 365 Individual and Group Processes 3 cr. hrs.
PSYC 420 Introduction to Learning Disabilities 3 cr. hrs.
PSYC 421 Mental Retardation 3 cr. hrs.
POLS 225 Introduction to Public Administration 3 cr. hrs.
POLS 253 State and Local Politics 3 cr. hrs.
POLS 256 Public Policymaking 3 cr. hrs.
HIST 310 History of American Political Thought 3 cr. hrs.
WMST 200 Introduction to Women's Studies 3 cr. hrs.
INTS 200 Introduction to International Studies 3 cr. hrs.

Sociology (SOCI)
Department of Sociology, Anthropology, and Criminal Justice
College of Arts and Sciences

326 Kleinpell Fine Arts Building
(715) 425-3992 cr. hrs.
Web Site: www.uwrf.edu/sociology/

Brian E. Copp - Chair, Tricia Davis, Jean Hector Faley, Clifford Mottaz, Timothy E. Nissen, Edward Robins, Rich Wallace

The Department of Sociology, Anthropology, and Criminal Justice offers several options for Majors and Minors:
1. Major in Sociology Liberal Arts-Sociology Major may be used as part of a Broad-Field Social Studies Major;
2. Minor in Sociology-Liberal Arts;
3. Minor in Sociology-Education;
4. Minor in Anthropology;
5. Minor in Criminal Justice (Sociology Major); and

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.
Social and Behavioral Sciences: SOCI 100 or ANTH 100

Sociology Major: 39 Total Credits
Core Requirements: 18 cr. hrs.
SOCI 100 Introduction to Sociology (counts 3 cr. in Gen. Ed.)
or ANTH 100 Introduction to Anthropology (counts 3 cr. in Gen. Ed.)
SOCI 200 Sociological Inquiry 3 cr. hrs.
SOCI 208 Sociology of Diversity 3 cr. hrs.
or SOCI 225 Sociology of Race and Ethnicity
or ANTH 225 Sociology of Race and Ethnicity
SOCI 250 Social Statistics 3 cr. hrs.
SOCI 300 Research Methods 3 cr. hrs.
SOCI 400 Social and Cultural Theory 3 cr. hrs.
SOCI 480 Senior Seminar 3 cr. hrs.
Directed Electives: 21 cr. hrs.
15 credits must be at 300/400 level with at least 6 credits at the 400 level
SOCI 205 Culture and Personality 3 cr. hrs.
or ANTH 205 Culture and Personality
SOCI 211 Global Perspectives on Children 3 cr. hrs.
or ANTH 211 Global Perspectives on Children
SOCI 218 Deviant Behavior 3 cr. hrs.
SOCI 221 Global Perspectives on Women 3 cr. hrs.
or ANTH 221 Global Perspectives on Women
SOCI 227 Religious Groups and Cults 3 cr. hrs.
SOCI 228 Native American Cultures 3 cr. hrs.
or ANTH 228 Native American Cultures
SOCI 230 Sociology of Sport and Leisure 3 cr. hrs.
SOCI 240 Social Problems 3 cr. hrs.
SOCI 245 Environmental Sociology 3 cr. hrs.
SOCI 247 Human Diversity and Development 3 cr. hrs.
or ANTH 247 Human Diversity and Development
SOCI 315 Sociology of Later Life 3 cr. hrs.
SOCI 323 Sociology of the Family 3 cr. hrs.
SOCI 326 Sociology of Gender Roles 3 cr. hrs.
SOCI 330 Social Organization 3 cr. hrs.
SOCI 338 Global Perspectives on Health and Disease 3 cr. hrs.
or ANTH 338 Global Perspectives on Health and Disease
SOCI 340 Sociology of Rural Life 3 cr. hrs.
SOCI 345 Sociology of Urban Life 3 cr. hrs.
SOCI 348 Faces of Culture 3 cr. hrs.
or ANTH 348 Faces of Culture
SOCI 378 Semester Abroad Research 3-6
SOCI 389 Special Topics in Sociology 2-3
or ANTH 389 Special Topics in Anthropology
or 2-3 SOCI 410 Social Psychology 3 cr. hrs.
SOCI 435 Social and Cultural Change 3 cr. hrs.
or ANTH 435 Social and Cultural Change
SOCI 445 Power and Inequality 3 cr. hrs.
SOCI 490 Readings in Sociology 1-2 cr. hrs.
or ANTH 490 Readings in Anthropology
or 1-2 SOCI 499 Independent Study 1-2 cr. hrs.
or ANTH 499 Independent Study or 1-2 cr. hrs.

Sociology Minor - Liberal Arts or Education: 24 Total Credits
Required Courses: 9 cr. hrs.
SOCI 100 Introduction to Sociology (counts 3 cr. in Gen. Ed.)
or ANTH 100 Introduction to Anthropology (counts 3 cr. in Gen. Ed.)
SOCI 200 Sociological Inquiry 3 cr. hrs.
SOCI 208 Sociology of Diversity 3 cr. hrs.
or SOCI 225 Sociology of Race and Ethnicity
or ANTH 225 Sociology of Race and Ethnicity
SOCI 400 Social and Cultural Theory 3 cr. hrs.
General Electives in Sociology/Anthropology 15 cr. hrs.
(at least 9 credits must be at 300/400 level)

Broad Field Social Studies Major
For those who wish to teach sociology in high school, the required major is the Broad Field Social Studies Major, see page 163.

Soil Science (SOIL)
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html


Soil Science Minor: 22 Total Credits
Choose from the following:
SOIL 311 Soil Fertility 4 S
OIL 325 Hydric Soils and Wetland Environments 3 cr. hrs.
SOIL 350 Pedology 4 cr. hr.
SOIL 440 Soil and Water Conservation 4 cr. hr.
SOIL 460 Soil Physics 3 cr. hrs.
GEOL 101 Introductory Geology 3 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hr.

Speech Communication and Theatre Arts (SCTA)
Department of Speech Communication and Theatre Arts
College of Arts and Sciences
B-24 Kleinpell Fine Arts Building  
(715) 425-3971  
Web Site : http://www.uwrf.edu/scta/  

Margaret M. Swanson-Chair, Suzanne Hagen, Robin Murray, James Pratt, Ronald Snell, Kenneth Stofferahn, Richard Vogel, Barbara L. Werner, James Zimmerman  

General Education Requirements:  
BA and BS Liberal Arts majors as listed on pages 34-35.  
BS Education majors as listed on pages 47-48.  

Speech Communication Major - Liberal Arts, B.S.  
Speech Communication Emphasis 34 Total Credits  
Required Courses: 16 cr. hrs.  
SCTA 106 Interpersonal Communication 3 cr. hrs.  
SCTA 207 Listening Skills 3 cr. hrs.  
SCTA 306 Nonverbal Communication 3 cr. hrs.  
SCTA 311 Persuasion 3 cr. hrs.  
SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.  
Directed Electives: 18 cr. hrs. SCTA 111 Argumentation and Decision Making 3 cr. hrs.  
SCTA 206 Family Communication 3 cr. hrs.  
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.  
or SCTA 316 Organizational Communication  
SCTA 211 Public Speaking 3 cr. hrs.  
SCTA 313 Intercultural Communication 3 cr. hrs.  
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.  
SCTA 319 Freedom to Speak 3 cr. hrs.  
SCTA 414 Speech in History 3 cr. hrs.  
SCTA 440 Gender Communication 3 cr. hrs.  
SCTA 370 Intercollegiate Debate 1 cr. hr.  
or SCTA 371 Intercollegiate Forensics  
or 1 SCTA 379 Internship 3-12 cr. hrs.  
SCTA 499 Independent Study/Independent Research 1-3  

Theatre Emphasis 36 Total Credits  
Required Courses: 23 cr. hrs.  
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.  
SCTA 131 Design for the Theatre 3 cr. hrs.  
SCTA 288 Career Development: Theatre Arts 1 SCTA 335 Directing I 3 cr. hrs.  
SCTA 337 History of Theatre - Ancient through Renaissance 3 cr. hrs.  
SCTA 338 History of Theatre - 18th Century to Present 3 cr. hrs.  
or SCTA 339 American Theatre  
SCTA 379 Internship 3-12 SCTA 499 Independent Study/Independent Research 1-3 SCTA 484  
Senior Portfolio Seminar in SCTA 1  
Directed Electives: 9 cr. hrs.  
Determined in consultation with advisor, depending on student focus Choose one from the following:  
SCTA 231 Stage Technology and Scene Painting 3 cr. hrs.  
SCTA 332 Stage Costuming 3 cr. hrs.  
SCTA 333 Stage Lighting 3 cr. hrs.
Choose one from the following:
SCTA 221 Acting II: Characterization 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
SCTA 435 Directing II 3 cr. hrs.
Choose one from the following:
SCTA 230 Playwrights of Color 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
SCTA 336 Costume and Fashion: Mirror of History 3 cr. hrs.
SCTA 338 History of Theatre - 18th Century to Present 3 cr. hrs.
SCTA 339 American Theatre 3 cr. hrs.
Directed Electives: 4 cr. hrs.
SCTA 232 Makeup for Theatre, Film, and Video 3 cr. hrs.
SCTA 271 Summer Theatre 1-3
SCTA 322 Arts Management 3 cr. hrs.
SCTA 327 Children's Theatre and Puppetry 3 cr. hrs.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.
SCTA 375 Theatre Practicum: Production 1 cr. hr.
SCTA 376 Theatre Practicum: Design and Technology 1 cr. hr.

Professional and Organizational Communication Emphasis 34-35 Total Credits

Students should take SCTA 116 for General Education Requirement. Required Courses: 22-23 cr. hrs.

SCTA 106 Interpersonal Communication 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 216 Communication in the Interview 3 cr. hrs.
SCTA 316 Organizational Communication 3 cr. hrs.
SCTA 379 Internship 3-12 cr. hrs.
SCTA 499 Independent Study/Independent Research
and/or 1-3 SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Directed Electives: 12 cr. hrs.
SCTA 111 Argumentation and Decision Making 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SCTA 318 Communication and Leadership 3 cr. hrs.
SCTA 360 Corporate Electronic Communication 3 cr. hrs.
SCTA 416 Communication Training and Development in Organizations 3 cr. hrs.
SCTA 440 Gender Communication 3 cr. hrs.

After consultation with the academic advisor, up to 6 directed elective credits from the approved list of courses in other departments may be taken to achieve a specific career path.

Mass Communication Emphasis 35 Total Credits

Required Courses: 26 cr. hrs.
SCTA 151 Broadcast Performance 3 cr. hrs.
SCTA 160 TV Studio Production 3 cr. hrs.
SCTA 260 Electronic Field Production 3 cr. hrs.
SCTA 261 Electronic Media Copy Writing 3 cr. hrs.
SCTA 310 Media Literacy - A Weapon Against Propaganda 3 cr. hrs.
SCTA 360 Corporate Electronic Communication 3 cr. hrs.
SCTA 377 Mass Communication Practicum 1 cr. hr.
SCTA 458 Broadcast Programming and Criticism 3 cr. hrs.
SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Directed Electives: 9 cr. hrs.

Choose one from the following:
SCTA 353 Mass Media and Popular Culture 3 cr. hrs.
SCTA 340 Gender, Race, Ethnicity and Class in Media 3 cr. hrs.
Choose one from the following: SCTA 311 Persuasion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.

Choose one from the following:
SCTA 379 Internship in SCTA 3-12 cr. hrs.
SCTA 200 Introduction to Film Studies 3 cr. hrs.
SCTA 216 Communication in the Interview 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 248 Film - Cultures in Conflict 3 cr. hrs.
SCTA 301 Film History 3 cr. hrs.

Speech Communication Major - Liberal Arts B.A.: 34 Total Credits
Required Courses: 4 cr. hrs.
SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Directed Electives: 30 cr. hrs.
An approved plan of study must be filed with the Department of SCTA by the beginning of the junior year or immediately upon declaring a SCTA major.

Speech Communication Major - Secondary Education: 37 Total Credits
Required Courses: 31 cr. hrs.
SCTA 106 Interpersonal Communication 3 cr. hrs.
SCTA 111 Argumentation and Decision Making 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 211 Public Speaking 3 cr. hrs.
or SCTA 311 Persuasion
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.
SCTA 403 Directing the Secondary School Forensics Program 3 cr. hrs.
SCTA 407 Listening Instruction 3 cr. hrs.
SCTA 414 Speech in History 3 cr. hrs.
SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Electives in SCTA 6 cr. hrs.

Speech Communication Minor - Secondary Education: 24 Total Credits
Required Courses: 24 cr. hrs. SCTA 106 Interpersonal Communication 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 211 Public Speaking 3 cr. hrs.
or SCTA 311 Persuasion
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.
SCTA 403 Directing the Secondary School Forensics Program 3 cr. hrs.
SCTA 407 Listening Instruction 3 cr. hrs.
SCTA 414 Speech in History 3 cr. hrs.
A research/writing course experience is required in the major or another field; SCTA 284 Sophomore Seminar or another course approved by the department chair, will satisfy this requirement. A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.

Speech Communication Minor - Elementary Education: 24 Total Credits
Required Courses: 9 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 407 Listening Instruction 3 cr. hrs.
Directed Electives: 9 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 327 Children's Theatre and Puppetry 3 cr. hrs.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.
SCTA 335 Directing I 3 cr. hrs.
or SCTA 231 Stage Technology and Scene Painting
Electives in SCTA: 6 cr. hrs.
A research/writing course experience is required in the major or another field; SCTA 284 Sophomore Seminar or another course approved by the department chair, will satisfy this requirement. A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.

Speech Communication Minor - Liberal Arts, B.S.: 24 Total Credits
Required Courses 12 cr. hrs.
SCTA 106 Interpersonal Communication 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
Directed Electives 12 cr. hrs.
SCTA 111 Argumentation and Decision Making 3 cr. hrs.
SCTA 206 Family Communication 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
or SCTA 316 Organizational Communication
SCTA 211 Public Speaking 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.
SCTA 319 Freedom to Speak 3 cr. hrs.
SCTA 414 Speech in History 3 cr. hrs.
SCTA 440 Gender Communication 3 cr. hrs.
SCTA 370 Intercollegiate Debate 1 cr. hr.
or SCTA 371 Intercollegiate Forensics
or 1 SCTA 379 Internship in SCTA 3-12 cr. hrs.
SCTA 499 Independent Study/Independent Research
A research/writing course experience is required in the major or another field; SCTA 284
Sophomore Seminar or another course approved by the department chair, will satisfy this requirement.
A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.

Teaching English to Speakers of Other Languages (TESOL)
Department of English
College of Arts and Sciences
245 Kleinpell Fine Arts Building
(715) 425-3537
Web Site: www.uwrf.edu/english/welcome.html


TESOL Major - Liberal Arts: 36 Total Credits
Foreign Language Requirement: (6 cr. hrs.)
(credits not counted in major)
6 semester hours of a foreign language, the high school equivalent, or proven proficiency in a foreign language is required of all students pursuing a TESOL major. This foundation requirement is not included in the number of credit hours needed for the major proper. The 6 semester hours are separate from the Cultural Component. A first language used by a major who is a non-native speaker of English to satisfy this language requirement cannot be used as the basis for satisfying the cultural requirement below; study in the English language should be used for such a student or, in the case of fluency in English, the student may request to do the cultural component in a language other than English or the student’s native language. In the case of fluency in both English and a native language, a student may elect to satisfy this language requirement by a third language.
Required Courses: 24 cr. hrs.
ENGL 302 Theory and Methodology of TESOL 3 cr. hrs.
ENGL 311 Introduction to Language and Linguistics 3 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
ENGL 420 Pedagogical Grammar 3 cr. hrs.
PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
COMD 263 Phonetics 3 cr. hrs.
Directed Electives: 12-14 cr. hrs.
Cultural Component 6-8 cr. hrs.
Choose one of the following four ways to fulfil this component:
1. Foreign Language 6-8 cr. hrs. Course work to fulfill the Cultural Component must be in one language; test out credits must be supplemented by 3 credits at the 200 level or above. The Cultural Component requirement may be fulfilled with course work in the same language as that required for the Foreign Language requirement or in a different language, but additional foreign language course work must be beyond that required for the Bachelor of Science or Bachelor of Arts degree. Alternative cultural component features for international students: International students
who select this major generally have learning circumstances and career goals that differentiate them from native English speakers. Therefore, course work in English (6-8 credits at the 200-level or above) selected in consultation with the advisor must be used to fulfill the cultural component. (In the case of fluency in English, an international student may request to do the cultural component foreign language option in a language other than English.) or
2. ENGL 378 Any University 378, Semester Abroad Research 6 cr. hrs. or
3. INTS 377 Semester Abroad 6 cr. hrs. or
4. Select two of the following courses: 6 cr. hrs.
   ENGL 379 Cooperative Education and Internship II 3 cr. hrs.
   ENGL 450 Non-Native Speakers in the Midwest 3 cr. hrs.
   ENGL 471 Issues in Bilingualism 3 cr. hrs.
   MODL 376 Mexico: A Cultural Experience 3 cr. hrs.
Select two of the following courses: 6 cr. hrs.
   ANTH 348 Faces of Culture 3 cr. hrs.
   ENGL 206 Ethnic Film and Literature 3 cr. hrs.
   ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
   SCTA 306 Nonverbal Communication 3 cr. hrs.
   SCTA 313 Intercultural Communication 3 cr. hrs.
   SOCI 205 Culture and Personality 3 cr. hrs.
   TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.

TESOL Minor - Liberal Arts: 24 Total Credits
Foreign Language Requirement: (6 cr. hrs.)
(credits not counted in minor)
6 semester hours of a foreign language, the high school equivalent, or proven proficiency in a foreign language is required of all students pursuing a TESOL minor. This foundation requirement is not included in the number of credit hours needed for the minor proper. If English is not your native language, you have already fulfilled this requirement.
Required Courses: 21 cr. hrs.
   ENGL 302 Theory and Methodology of TESOL 3 cr. hrs.
   ENGL 311 Introduction to Language and Linguistics 3 cr. hrs.
   ENGL 320 Structure of English 3 cr. hrs.
   ENGL 322 Acquisition of Language 3 cr. hrs.
   ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
   ENGL 420 Pedagogical Grammar 3 cr. hrs.
   PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
Directed Electives: 3 cr. hrs.
   ANTH 348 Faces of Culture 3 cr. hrs.
   ENGL 206 Ethnic Film and Literature 3 cr. hrs.
   ENGL 450 Non-Native Speakers in the Midwest 3 cr. hrs.
   ENGL 471 Issues in Bilingualism 3 cr. hrs.
   ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
   SCTA 306 Nonverbal Communication 3 cr. hrs.
   SCTA 313 Intercultural Communication 3 cr. hrs.
   SOCI 205 Culture and Personality 3 cr. hrs.
   TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.

TESOL Major - Education: TESOL-Education 36-38 Total Credits
Foreign Language Requirement: 6 cr. hrs.
(credits not counted in major)
(credits not counted in major)
6 semester hours of a foreign language, the high school equivalent, or proven proficiency in a foreign language is required of all students pursuing a TESOL major. This foundation requirement is not included in the number of credit hours needed for the major proper. The 6 semester hours are separate from the Cultural Component. A first language used by a major who is a non-native speaker of English to satisfy this language requirement cannot be used as the basis for satisfying the cultural requirement below; study in the English language should be used for such a student or, in the case of fluency in English, the student may request to do the cultural component in a language other than English or the student’s native language. In the case of fluency in both English and a native language, a student may elect to satisfy this language requirement by a third language.

Required courses: 21 cr. hrs. ENGL 302 Theory and Methodology of TESOL 3 cr. hrs.
ENGL 311 Introduction to Language and Linguistics 3 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
ENGL 420 Pedagogical Grammar 3 cr. hrs.
COMD 263 Phonetics 3 cr. hrs.
Directed Electives: 15-17 cr. hrs.
Cultural Component as listed for the Major in TESOL-Liberal Arts. 6-8 cr. hrs.
ANTH 348 Faces of Culture 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 450 Non-Native Speakers in the Midwest 3 cr. hrs.
ENGL 471 Issues in Bilingualism 3 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SOCI 205 Culture and Personality 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.

Required for certification: TED 428 Techniques of Elementary/Middle/Secondary Education: TESOL 3 cr. hrs.

TESOL Minor - Education: 24 Total Credits
Foreign Language Requirement: 6 cr. hrs. (credits not counted in minor)
As outlined for the Major in TESOL-Liberal Arts, page 173.
Required Courses: 18 cr. hrs.
ENGL 302 Theory and Methodology of TESOL 3 cr. hrs.
ENGL 311 Introduction to Language and Linguistics 3 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
ENGL 420 Pedagogical Grammar 3 cr. hrs.
Directed Electives: 6 cr. hrs. ANTH 348 Faces of Culture 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 450 Non-Native Speakers in the Midwest 3 cr. hrs.
ENGL 471 Issues in Bilingualism 3 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SOCI 205 Culture and Personality 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.
Required for certification: TED 428 Techniques of Elementary/Middle/Secondary Education: TESOL
3 cr. hrs.

Theatre
Department of Speech Communication and Theatre Arts
College of Arts and Sciences

B-24 Kleinpell Fine Arts Building
(715) 425-3971
Web Site : http://www.uwrf.edu/scta/

Margaret M. Swanson-Chair, Suzanne Hagen, Robin Murray, James Pratt, Ronald Snell, Kenneth Stofferahn, Richard Vogel, Barbara L. Werner, James Zimmerman

Theatre Minor - Liberal Arts B.S.: 24 Total Credits

Required Courses: 15 cr. hrs.
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.
SCTA 131 Design for the Theatre 3 cr. hrs.
SCTA 335 Directing I 3 cr. hrs.
Choose one from the following:
SCTA 231 Stage Technology and Scene Painting 3 cr. hrs.
SCTA 332 Stage Costuming 3 cr. hrs.
SCTA 333 Stage Lighting 3 cr. hrs.
Choose one from the following:
SCTA 337 History of Theatre, Ancient through Renaissance 3 cr. hrs.
SCTA 338 History of Theatre, 18th Century to Present 3 cr. hrs.
SCTA 339 American Theatre 3 cr. hrs.

Directed Electives: 9 cr. hrs.
SCTA 221 Acting II: Characterization 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
SCTA 230 Playwrights of Color 3 cr. hrs.
SCTA 231 Stage Technology and Scene Painting (if not chosen under required) 3 cr. hrs.
SCTA 232 Makeup for Theatre, Film, and Video 3 cr. hrs.
SCTA 271 Summer Theatre 1-3 SCTA 288 Career Development: Theatre Arts 1 SCTA 323 Arts Management 3 cr. hrs.
SCTA 327 Children's Theatre and Puppetry 3 cr. hrs.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.
SCTA 332 Stage Costuming (if not chosen under required) 3 cr. hrs.
SCTA 333 Stage Lighting (if not chosen under required) 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
SCTA 336 Costume and Fashion: Mirror of History 3 cr. hrs.
SCTA 375 Theatre Practicum: Production 1 SCTA 376 Theatre Practicum: Design and Technology 1
SCTA 435 Directing II 3 cr. hrs.
SCTA 379 Internship in SCTA 3-12 SCTA 499 Independent Study/Independent Research 1-3 A research/writing course experience is required in the major or another field; SCTA 284 Sophomore Seminar or another course approved by the department chair, will satisfy this requirement. A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.
Women's Studies (WMST)
Interdisciplinary Program

270 Kleinpell Fine Arts Building
(715) 425-4895
Web Site: http://www.uwrf.edu/womens_studies/
Barbara Werner-Coordinator b.l.werner@uwrf.edu

A minor in women's Studies presents students with the following: past and present scholarship on
women; a methodology which treats the experience of both genders as equal in value and scholarly
importance; and opportunities to conduct interdisciplinary research in women's studies. The minor
consists of a core unit and elective courses, many of which are multidisciplinary.

Women's Studies Minors: 23 Total Credits
Required Courses 6 cr. hrs.
WMST 200 Introduction to Women's Studies 3 cr. hrs.
WMST 480 Seminar: Ethnicity and Gender 3 cr. hrs.
Directed Electives: 17 cr. hrs.
Select at least 6 courses from the following:
WMST 205 Women's History: United States 3 cr. hrs.
WMST 206 Family Communication 3 cr. hrs.
WMST 214 Women in Literature 3 cr. hrs.
WMST 220 Gender Issues in Science 3 cr. hrs.
WMST 221 Global Perspectives on Women 3 cr. hrs.
WMST 235 American Autobiography 3 cr. hrs.
WMST 300 Women and Film 3 cr. hrs.
WMST 303 Women's History: Europe 3 cr. hrs.
WMST 305 Women's History: Global Perspectives 3 cr. hrs.
WMST 314 Women and Politics 3 cr. hrs.
WMST 323 Sociology of the Family 3 cr. hrs.
WMST 326 Sociology of Gender Roles 3 cr. hrs.
WMST 354 Women and the Law 3 cr. hrs.
WMST 379 Internship in Women's Studies 2-3
WMST 389 Topics in Women's Studies .5-3
WMST 440 Gender Communication 3 cr. hrs.
WMST 443 American Ethnic Women Writers 3 cr. hrs.
WMST 499 Directed Studies 1-3
BLAW 389 Special Topics in Business Law: Sexual Harassment and the Law 1 cr. hr.
ECON 312 Political Economy of Discrimination 3 cr. hrs.
HEAL 460 Teaching of Family Life and Sex Education 2 cr. hrs.
PSYC 225 Psychology of Sex Differences 3 cr. hrs.

Double Minor - Women's Studies/Ethnic Studies
It is possible for Arts and Sciences majors to double minor in Women's Studies and Ethnic Studies
with minimal additional credits. The double minor is flexible enough for students to graduate on
time while supporting virtually any major. By choosing the Women's Studies/Ethnic Studies double
minor, students also fulfill 6 hours of the Arts and Sciences Liberal Arts requirements as well as the
3 hour cultural diversity requirement.
Required Courses 9 cr. hrs.
WMST 200 Introduction to Women's Studies 3 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
ETHN/WMST 480 Seminar: Ethnicity and Gender 3 cr. hrs.
Recommended Courses: 6 cr. hrs. If students choose not to take recommended courses, they must take one Women Studies elective and one Ethnic Studies-Ethnic Related course for each recommended course not taken. This will increase the total hours required for the double minor.
WMST 235 American Autobiography 3 cr. hrs.
WMST 443 American Ethnic Women Authors 3 cr. hrs.
ECON 312 Political Economy of Discrimination 3 cr. hrs.
Electives: 20 cr. hrs.
WMST 11 cr. hrs. minimum
Specific Ethnic Groups courses 9 cr. hrs. minimum
ACCOUNTING (ACCT)
Department of Business Administration
College of Business and Economics

315 North Hall
(715) 425-3337

Jacque Foust-Chair, Dawn Hukai, Carl Popelka, Mary Tichich

Accounting involves measuring business activities and communicating this information to investors, creditors, and other decision makers, who will use it to make sound, informed, financial decisions. This practice serves to encourage investment activity, which in turn creates jobs and helps the economy to grow. The program of study is based on a solid foundation in the liberal arts to provide the student with thinking, communication, writing, and human and value judgment skills. The tool courses (lower division requirements) develop the student's critical analytical, problem solving, and quantitative decision-making capabilities through a solid grounding in modern business and economic theory.

It is the intention of the department to expose the student to the leading edge of theory while emphasizing the importance of human relationships and the ability to form sound ethical and moral decisions. In short, the program intends to equip the student for lifelong learning. Students are required to have a minimum of 150 semester credit hours in order to sit for the CPA exam in Wisconsin and forty other states. The 150 semester hours may be completed at the undergraduate or the graduate level. Students should consult their advisor for the best course of study. Students should plan to take MATH 146 (if necessary) before taking MATH 156 as required in General Education. The lower division requirements must be completed before the student begins the upper division requirements and the required accounting courses. A 2.5 grade point average must be maintained in the required accounting and business law courses to graduate with a major in accounting.

This program is accredited by the Wisconsin State Board of Accountancy. Overall, one-half of the credits required for graduation must be taken outside of the School of Business and Economics. At least 50 percent of the business credits required must be taken in the UW-RF College of Business and Economics

Careers in Accounting
Students interested in the following accounting career opportunities should select courses from those recommended below with the help of their advisor.
Certified Public Accountant
ACCT 324, 311
Certified Management Accountant
ACCT 311; MNGT 318, 320, 361
International Accounting
ACCT 311; ECON 340, 342; MKTG 355; and one year of a modern language.
Accounting Systems Analyst
MNGT 318, 361, 365
Government or Non-profit Accounting
ACCT 324, 311

General Education Requirements
General Education Requirements as listed on pages pages 44-45 with the following exceptions:
Mathematics: 3 cr. hrs.
MATH 156 Calculus for Business and Social Sciences
or ECON 205 Quantitative Analysis
or MNGT 205 Quantitative Analysis
or MATH 166 Calculus I (4 cr.)

Accounting Broad Area Major: 69 Total Credits

Lower Division Requirements (Tool Courses): 24 cr. hrs.
ECON 201 Principles of Microeconomics 3 cr. hrs.
ECON 202 Principles of Macroeconomics 3 cr. hrs.
ACCT231 Principles of Accounting I 3 cr. hrs.
ACCT232 Principles of Accounting II 3 cr. hrs.
MNGT 265 The Computer in Business 3 cr. hrs.
ECON 226 Introduction to Statistics 3 cr. hrs.
or MATH 226 Introduction to Statistics
BLAW 265 Business Law I 3 cr. hrs.
Choose one course from:
SCTA 116 Business and Professional Communication
ENGL 251 Advanced Composition
ENGL 266 Business Writing
ENGL 367 Technical Writing

Required Courses: 39 cr. hrs.
BLAW 266 Business Law II 3 cr. hrs.
MNGT 300 Management and Organizational Behavior 3 cr. hrs.
MKTG 310 Principles of Marketing 3 cr. hrs.
FINC 345 Managerial Finance 3 cr. hrs.
ACCT321 Intermediate Accounting I 3 cr. hrs.
ACCT322 Intermediate Accounting II 3 cr. hrs.
ACCT356 Managerial Cost Accounting 3 cr. hrs.
ACCT357 Advanced Managerial Cost Accounting 3 cr. hrs.
ACCT360 Federal Income Tax I 3 cr. hrs.
ACCT361 Federal Income Tax II 3 cr. hrs.
ACCT366 Accounting Systems 3 cr. hrs.
ACCT430 Advanced Accounting 3 cr. hrs.
ACCT461 Auditing 3 cr. hrs.

Directed Electives: 6 cr. hrs.
Select from Accounting (not ACCT201), Management (not MNGT 100, 150, or 205), Finance (not FINC 210), Marketing (not MKTG 311), ECON (not ECON 100 or 205), Computer Science (not CPTS 105 or 151), ENGL 251 or ENGL 367.
Agricultural Business
Department of Agricultural Economics (AGEC)
College of Agriculture, Food and Environmental Sciences

103 Agriculture Science Hall
(715) 425-3298

Nate Splett-Chair, Lewis May, Stanley Schraufnagel, James Shatava, Larry Swain, David Trechter.

General Education Requirements as listed on pages 26-27.

Agricultural Business Major: 59 Total Credits

Foundation Courses in Agriculture 15 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.

Required Courses: 30 cr. hrs.
AGEC 231 Agricultural Economics II 3 cr. hrs.
AGEC 250 World Food and Population 3 cr. hrs.
AGEC 320 Statistical Methods 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
AGEC 365 Agricultural Finance 3 cr. hrs.
AGEC 440 Agricultural Policy I (writing intensive) 3 cr. hrs.
AGEC 441 Agricultural Policy II 3 cr. hrs.
AGEC 442 Production Economics 3 cr. hrs.
AGEC 450 Introduction to Natural Resource Economics 3 cr. hrs.
AGEC 456 Commodity Marketing 3 cr. hrs.
Select A or B Below 14 cr. hrs.

A.
AGEC 240 Cooperatives 2 cr. hrs.
AGEC 305 Agricultural Business Accounting 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 368 Professional Selling (writing intensive) 3 cr. hrs.
AGEC 468 Agribusiness Firm Management (writing intensive) 3 cr. hrs.

B.
ECON 326 Statistical Methods for Economics and Business 3 cr. hrs.
ECON 426 Forecasting and Economics 3 cr. hrs.
AGEC 300 or 400 level courses 8 cr. hrs.

Required Supporting Courses: 3-4 cr. hrs.
MATH 156 Calculus for Business and Social Science 3 cr. hrs
or MATH 166 Calculus I (Fulfills the Mathematics General Education Requirement)
Computer literacy, including competency in spreadsheets.

Directed Electives: 15 cr. hrs.
If A is selected above, then select 15 credits from one of the minors in the Agricultural Engineering Technology or Animal and Food Science or Plant and Earth Science departments
If B is selected above, then select MATH 166 and, with the consent of advisor, 15 credits from ECON, MATH, and/or CPTS.
Agricultural Business Minor: 24 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
AGEC 231 Agricultural Economics II 3 cr. hrs.
AGEC 240 Cooperatives 3 cr. hrs.
AGEC 305 Agricultural Business Accounting 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices (writing intensive) 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
or AGE 365 Agricultural Finance
AGEC 368 Professional Selling (writing intensive) 3 cr. hrs.
AGEC 468 Agribusiness Firm Management (writing intensive) 3 cr. hrs.

Agricultural Economics Minor: 24 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
AGEC 231 Agricultural Economics II 3 cr. hrs.
AGEC 240 Cooperatives 3 cr. hrs.
AGEC 320 Statistical Methods 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices (writing intensive) 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
or AGE 365 Agricultural Finance
AGEC 440 Agricultural Policy I (writing intensive) 3 cr. hrs.
AGEC 442 Agricultural Policy II (writing intensive) 3 cr. hrs.
General Education Requirements as listed on pages 47-48 with the following exceptions:

Communication:
ENGL 111, 112 Humanities and Fine Arts
ART 100 Introduction to Art
or MUS 100 Understanding Music
or SCTA 105 Introduction to Theatre and Drama
Non-Western History: PHIL 245 is not an option

Sciences to include:
BIOL 100 Introduction to Biology
ESM 300 Environmental Education
CHEM 111 General Chemistry I
CHEM 116 General Chemistry I Lab
CHEM 230 General Organic Chemistry
or BIOL 210 General Botany
or BIOL 230 General Zoology

Professional Education Requirements: 29 cr. hrs.
AGED 201 Introduction to Agricultural and Extension Education 3 cr. hrs.
TED 212 Educational Psychology: Middle and Secondary Education (writing intensive) 5 cr. hrs.
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
TED 440 Techniques of Middle/Secondary Education: Agriculture 3 cr. hrs.
TED 473 Student Teaching: Middle Level 6 cr. hrs.
TED 474 Student Teaching: Secondary 6 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.

CAFES Course Requirements: 51 Total Credits
Foundation Requirements-Select five: 14-15 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science
ANSC 111 Introduction to Animal Science 3 cr. hrs.
FDSC 112 Introduction to Food Science 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
ESM 109 Introduction to Forestry 2 cr. hrs.

Agricultural Education Major: 30-32 cr. hrs.
AGED 202 Leadership and Group Dynamics 3 cr. hrs.
AGED 369 Philosophy of Vocational and Cooperative Education (writing intensive) 4 cr. hrs.
AGED 403 Agricultural Education Programs and Youth Organizations (writing intensive) 3 cr. hrs.
AGED 462 Curriculum Design in Vocational Education (writing intensive) 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
AGRN 257 Genetics 3 cr. hrs.
or ANSC 257 Genetics
HORT 169 Introduction to Horticulture 3 cr. hrs.
Choose one of the following:
AGEC 240 Cooperatives 2 cr. hrs.
AGEC 355 Agricultural Markets and Prices (writing intensive)
Choose one of the following:
AGEC360 Farm Management 3 cr. hrs.
AGEC468 Agribusiness Firm Management (writing intensive)
Choose one of the following:
AGEN 240 Structures 3 cr. hrs.
AGEN 320 Internal Combustion Engines
AGEN 325 Alternate Energy Systems
AGEN 333 Landscape Construction
AGEN 350 Applied Electricity
AGEN 440 Soil and Water Conservation
Directed CAFES Electives: 5-7 cr. hrs.
General Education Requirements as listed on pages 26-27 with the following exceptions:

Social and Behavioral:
ESM 105 Introduction to Environmental Studies, required for Environmental Engineering Technology Option

Sciences:
BIOL 100 or BIOL 150 or GEOL 101, CHEM 111, 116, PHYS 151 or 161 required.

Mathematics: MATH 156 or MATH 166 required

Foundation Courses in Agriculture: 12 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
Choose one of the following: 3 cr. hrs.
ANSC 111 Introduction to Animal Science
FDSC 112 Introduction to Food Science
AGRN 161 Introduction to Plant Science
HORT 161 Introduction to Plant Science

Agricultural Engineering Technology Major: 51-60 Total Credits
Core Courses: 24 cr. hrs.
AGEN 240 Structures 3 cr. hrs.
AGEN 350 Applied Electricity 3 cr. hrs.
AGEN 352 Food and Process Engineering 3 cr. hrs.
AGEN 355 Irrigation and Drainage (writing intensive) 3 cr. hrs.
GENG 245 Materials Design Requirements 3 cr. hrs.
GENG 265 Engineering Graphics 3 cr. hrs.
GENG 368 CAD Applications 3 cr. hrs.
GENG 450 Engineering Project Management 3 cr. hrs.
PHYS 156 General Physics Laboratory 1 cr. hr.
or PHYS 101 General Physics Laboratory

Choose one of the following three options:
Agricultural Engineering Technology Option: 31-37 cr. hrs.
AGEN 320 Internal Combustion Engines 3 cr. hrs.
AGEN 361 Machinery and Power Mechanics 4 cr. hrs.
AGEN 363 Precision Agriculture Technology 3 cr. hrs.
AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. hrs.
GENG 235 Surveying 3 cr. hrs.

Choose two from:
AGEN 425 Environmental Engineering Technology 4 cr. hrs.
AGEN 443 Controlled Environment Systems 3 cr. hrs.
AGEN 455 Advanced Food and Process Engineering 3 cr. hrs.
AGEN 465 Fluid Power Systems 2 cr. hrs.
Choose two from:
AGEN 322 Analysis of Internal Combustion Engines 3 cr. hrs.
AGEN 325 Alternate Energy Systems 3 cr. hrs.
AGEN 365 Waste Management Systems (writing intensive) 3 cr. hrs.
Choose two from:
AGEN 255 Welding and Metal Manufacturing 3 cr. hrs.
GENG 201 Industrial Safety 2 cr. hrs.
GENG 236 Advanced Surveying 3 cr. hrs.
GENG 250 Statics 3 cr. hrs.
GENG 252 Dynamics 3 cr. hrs.
PHYS 152 General Physics II 4 cr. hr.
or PHYS 162 General Physics II
Environmental Engineering Technology Option 30-31 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hrs.
CHEM 117 General Chemistry Lab II 1 cr. hr. C
HEM 230 General Organic Chemistry 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hrs.
AGEN 365 Waste Management Systems (writing intensive) 3 cr. hrs.
AGEN 425 Environmental Engineering Technology 4 cr. hrs.
AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. hrs.
GENG 235 Surveying 3 cr. hrs.
Choose two from:
AGEN 325 Alternate Energy Systems 3 cr. hrs.
GEOL 445 Hydrogeology 3 cr. hrs.
AGEC 450 Introduction to Natural Resource Economics 3 cr. hrs.
ESM 360 Applied Hydrology and Water Quality 4 cr. hrs.
Mechanized Systems Management Option: 30-34 cr. hrs.
GENG 201 Industrial Safety 2 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
AGEC 305 Agricultural Accounting 3 cr. hrs.
AGEC 320 Statistical Methods 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 368 Professional Selling (writing intensive) 3 cr. hrs.
AGEC 468 Agribusiness Firm Management (writing intensive) 3 cr. hrs.
Choose two from:
AGEN 425 Environmental Engineering Technology 4 cr. hrs.
AGEN 443 Controlled Environment Systems 3 cr. hrs.
AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. hrs.
AGEN 455 Advanced Food and Process Engineering 3 cr. hrs.
AGEN 465 Fluid Power Systems 2 cr. hrs.
Choose two from:
AGEN 320 Internal Combustion Engines 3 cr. hrs.
AGEN 322 Analysis of Internal Combustion Engines 3 cr. hrs.
AGEN 325 Alternate Energy Systems 3 cr. hrs.
AGEN 361 Machinery and Power Mechanics 4 cr. hrs.
AGEN 363 Precision Agriculture Technology
AGEN 365 Waste Management Systems (writing intensive) 3 cr. hrs.
Required Supporting Courses: 4-14 cr. hrs.
Computer Literacy - students who are not prepared to use word processing and spreadsheet
programs to complete assignments in Agricultural Engineering Technology courses should elect CPTS 105 in their freshman year.
Agronomy (AGRN)
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345

Robert W. Baker-Chair, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove,
Michael Crotser, Terry L. Ferriss, Michael C. Kaltenberg, Kerry L. Keen, N. Larry Meyers, Michael D.
Middleton, Lanny Neel, Eric M. Sanden, Brian R. Smith, Roger A. Swanson, Donovan H. Taylor, Laine
Vignona, Ian S. Williams.

Agronomy Minor: 24 Total Credits
Required Courses: 18 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
AGRN 260 Plant and Seed Identification 2 cr. hrs.
AGRN 263 Forage Crop Production 3 cr. hrs.
AGRN 266 Corn and Soybean production (writing intensive) 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
SOIL 311 Soil Fertility 4 cr. hrs.
Directed Electives: 4 cr. hrs.
(consult with agronomy faculty for courses)
A four-year Bachelor of Science degree program. Students majoring in Agricultural Studies will acquire a broad knowledge of agriculture, and they will select a substantial number of elective courses to pursue special interests, either within or outside of the field of agriculture. In consultation with an advisor, students may choose elective courses in areas such as agronomy, animal science, communications, marketing, management, international studies, etc.

A minor in any agricultural subject area is required.

General Education Requirements as listed on pages 26-27 with the following exceptions:

Social and Behavioral:
ESM 105, Introduction to Environmental Studies

Sciences:
CHEM 111, 116, General Chemistry and Lab

Mathematics:
MATH 146, College Algebra, or equivalent

Foundation Requirements: 15 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science
ANSC 111 Introduction to Animal Science 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.

Agricultural Studies Major: 34 Total Credits
Choose one course from the following: 3 cr. hrs.
AGEC 305 Agricultural Accounting
AGEC 345 Agricultural Law
AGEC 355 Agricultural Markets and Prices
AGEC 360 Farm Management
AGEC 365 Agricultural Finance
Choose one course from the following: 3 cr. hrs.
AGED 110 Agricultural Communications
AGED 202 Leadership and Group Dynamics
Choose one course from the following: 3 cr. hrs.
AGEN 240 Structures
AGEN 320 Internal Combustion Engines
AGEN 325 Alternate Energy Systems
AGEN 333 Landscape Construction
AGEN 350 Applied Electricity
AGEN 352 Food and Process Engineering
AGEN 355 Irrigation and Drainage (writing intensive)
AGEN 361 Machinery and Power Mechanisms
AGEN 365 Waste Management Systems (writing intensive)
Choose one course from the following: 3-4 cr. hrs.
ANSC 231 Principles of Nutrition
ANSC 257 Genetics
ANSC 260 Animal Physiology (4 cr. hrs.)
Choose one course from the following: 3 cr. hrs.
AGRN 263 Forage Crop Production
AGRN 266 Corn and Soybean Production (writing intensive)
HORT 169 Introduction to Horticulture
Choose one course from the following: 4 cr. hrs.
SOIL 311 Soil Fertility
SOIL 440 Soil and Water Conservation
Also take: FDSC 112 Introduction to Food Science 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
and a 1-credit seminar class from one of the following:
ANSC 485, DASC 485, AGRN 485, HORT 485, ESM 485, or SOIL 485

Directed Electives: 7-8 cr. hrs.


Agricultural Studies Minor: 22 Total Credits
Choose four courses from the following: 12 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science
AGEC 230 Agricultural Economics I 3 cr. hrs.
FDSC 112 Introduction to Food Science 3 cr. hrs.
ESM 105 Introduction to Environmental Studies 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGED 110 Agricultural Communications 3 cr. hrs.
Directed Electives 10 cr. hrs.

Agricultural electives at the 200 level or above. Courses meeting requirements for an Agriculture, Food and Environmental Sciences major cannot be counted as agricultural elective in this minor. Students with majors in the following areas are not eligible to receive this minor: Agricultural Business, Agricultural Engineering Technology, Agricultural Studies, Animal Science, Crop and Soil Science, Dairy Science.
General Education Requirements as listed on pages 26-27 with the following exceptions:

- Sciences 8-9 cr. hrs.
- BIOL 150 is required
- CHEM 111 and CHEM 116 are required

Foundation Courses in Agriculture: 15 cr. hrs.

- ANSC 111 Introduction to Animal Science 3 cr. hrs.
- Select 4 from the following:
  - FDSC 112 Introduction to Food Science 3 cr. hrs.
  - AGEN 150 Introduction to Ag Engineering 3 cr. hrs.
  - AGRN 161 Introduction to Plant Science 3 cr. hrs.
  - or HORT 161 Introduction to Plant Science
  - AGEC 230 Agricultural Economics I 3 cr. hrs.
  - SOIL 210 Introduction to Soils 3 cr. hrs.

Animal Science Major: 42-44 Total Credits

Required Courses: 25 cr. hrs.

- ANSC 231 Principles of Nutrition 3 cr. hrs.
- ANSC 232 Applied Feeds and Feeding 3 cr. hrs.
- ANSC 257 Genetics 3 cr. hrs.
- ANSC 260 Animal Physiology 4 cr. hrs.
- ANSC 345 Animal Health 2 cr. hrs.
- ANSC 346 Principles of Animal Breeding 3 cr. hrs.
- ANSC 433 Advanced Nutrition 3 cr. hrs.
- ANSC 448 Reproductive Physiology 3 cr. hrs.
- ANSC 485 Seminar in Animal Science 1 cr. hr.

Species Emphasis:

Select A or B below

A. Meat Animals: 9 cr. hrs.
- ANSC 140 Meat and Meat Products 3 cr. hrs.
- Choose one from the following:
  - ANSC 365 Poultry Production 3 cr. hrs.
  - ANSC 366 Swine Production 3 cr. hrs.
  - ANSC 367 Beef Production 3 cr. hrs.
  - ANSC 368 Sheep Production 3 cr. hrs.
- Choose one from the following:
  - FDSC 240 Meat Processing 3 cr. hrs.
  - ANSC 467 Feedlot Management 3 cr. hrs.
  - or another production course
B. Equine: 10 cr. hrs.
ANSC 167 Equine Management and Equitation 2 cr. hrs.
ANSC 168 Equine Equitation and Management Lab 2 cr. hrs.
ANSC 369 Equine Production 3 cr. hrs.
Choose one from the following:
ANSC 261 Advanced Horsemanship 3 cr. hrs.
ANSC 268 Balanced Seat Applications 3 cr. hrs.
Options: (Choose one option)
Production Option: 9 cr. hrs.
Choose one from the following:
AGEC 305 Agricultural Accounting 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 456 Commodity Marketing 3 cr. hrs.
Choose one from the following:
AGEN 240 Structures 3 cr. hrs.
AGEN 255 Welding and Metal Manufacturing 3 cr. hrs.
AGEN 320 Internal Combustion Engines 3 cr. hrs.
AGEN 350 Applied Electricity 3 cr. hrs.
AGEN 361 Machinery and Power Mechanics 3 cr. hrs.
AGEN 365 Waste Mgmt System 3 cr. hrs.
Choose one from the following:
HORT 169 Intro to Horticulture 3 cr. hrs.
AGRN 263 Forage Crop Production 3 cr. hrs.
AGRN 266 Corn and Soybean Production 3 cr. hrs.
AGRN 267 Small Grain and Miscellaneous Crop Production 3 cr. hrs.
Other required courses for the Production Option:
CHEM 230 Gen Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.
Business Option Select three: 9 cr. hrs.
AGEC 305 Agricultural Business Accounting 3 cr. hrs.
AGEC 345 Agricultural Law 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 365 Agricultural Finance 3 cr. hrs.
AGEC 368 Professional Selling 3 cr. hrs.
AGEC 440 Agricultural Policy I 3 cr. hrs.
AGEC 468 Agribusiness Firm Management 3 cr. hrs.
Other required courses for the Business Option:
CHEM 230 Gen Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.
Science Option 10 cr. hrs.
CHEM 231 Organic Chemistry I 3 cr. hrs.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
or CHEM 246 Synthetic and Analytical Techniques I
or CHEM 237 Organic Chemistry Lab II
or CHEM 247 Synthetic and Analytical Techniques II
PHYS 151 General Physics (meets Gen Ed requirement) 4 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
MATH 147 College Algebra and Trigonometry 3 cr. hrs.
Other required courses for the Science Option:
CHEM 112 General Chemistry 4 cr. hrs.
CHEM 117 General Chemistry Lab 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hrs.
Also select one of the following:
ANSC 447 Endocrinology 2 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
BIOL 240 Cell Biology 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
PHYS 152 General Physics II 4 cr. hrs.
Alternative Option 10 cr. hrs.
Any minor of 22-24 credits (other than Animal Science or Dairy Science).
In addition to the minor the following three courses are required.
CHEM 230 General Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hrs.
Animal Science Minor: 22 Total Credits
Required Courses: 13 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 257 Genetics 3 cr. hrs.
ANSC 260 Animal Physiology 4 cr. hrs.
Electives (choose from any Animal Science course) 9 cr. hrs.
Anthropology Minor: 24 Total Credits
Required Courses: 12 cr. hrs.
SOCI 100 Introduction to Sociology (counts 3 cr. hrs. in general education)
or ANTH 100 Introduction to Anthropology (counts 3 cr. hrs. in general education)
Choose one of the following courses:
SOCI 221 Global Perspectives on Women 3 cr. hrs.
ANTH 221 Global Perspectives on Women 3 cr. hrs.
SOCI 225 Sociology of Race and Ethnicity 3 cr. hrs.
ANTH 225 Sociology of Race and Ethnicity 3 cr. hrs.
Take the following courses:
ANTH 247 Human Diversity and Development 3 cr. hrs.
ANTH 348 Faces of Culture 3 cr. hrs.
Choose one of the following courses:
ANTH 228 Native American Cultures 3 cr. hrs.
SOCI 338 Global Perspectives on Health and Disease 3 cr. hrs.
ANTH 338 Global Perspectives on Health and Disease 3 cr. hrs.
SOCI 211 Global Perspectives on Children 3 cr. hrs.
ANTH 211 Global Perspectives on Children 3 cr. hrs.
Electives in Sociology/Anthropology: 12 cr. hrs.
At least 6 credits must be at the 300/400 level.
ART (ART) Department of Art-College of Arts and Sciences
172 Kleinpell Fine Arts
(715) 425-3266

Michael Padgett-Chair, Carol Chase, Morgan Clifford, Jim Engebretson, Bernice Ficek-Swenson, David Heberlein, Lynn Jermal, Randy Johnston, Maren Kloppmann, Patrice Wernlund

Careers in Advertising Design and Computer Graphics. Students interested in a career in advertising design and computer graphics are advised to take a Broad Area Art Degree choosing options within the degree to become as broadly and professionally prepared as possible. An internship is recommended in the senior year. Advisor: M. Padgett.

Careers in Art Therapy. Students interested in a career in art therapy are advised to take an art major degree with a psychology minor. A program sheet to guide minor elective choices is available in the art department. Graduate school (M.A.) is required for registration in the field. Internships are available for senior students. Advisor: L. Jermal.

Semester Abroad Program. Each fall semester, art majors may participate in the Study Abroad Program, do an independent research project in a European country of their choice, and receive six credit hours in ART 378 and six credit hours of INTS 377. Participants must meet weekly for preparatory sessions during the spring semester preceding the experience abroad. Advisor: D. Heberlein.

Internship Program. The art department offers a number of opportunities for students to gain on-the-job experience as a supplement to their academic preparation. Students work under the direct supervision of a job supervisor and a member of the art faculty. See ART 379 for details. Advisor: M. Padgett.

Art Materials. Students are expected to buy some materials for most art courses. Material fees are required for some studio areas.

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.
Bachelor of Fine Arts -Liberal Arts: 66 Total Credits
(no minor required)
Foundation Courses in Art: 20 cr. hrs.
ART 121 Design Foundation 3 cr. hrs.
ART 131 Drawing I 3 cr. hrs.
ART 132 Drawing II 3 cr. hrs.
ART 211 Western Art to 1500 3 cr. hrs.
ART 212 Art History Since 1500 3 cr. hrs.
ART 309 Gallery Techniques 1-3 cr. hrs.
ART 320 Drawing from the Figure 3 cr. hrs.
ART 485 Senior Seminar 1 cr. hr.
Required Courses: 46 cr. hrs.
Choose 18 credits from:
ART 225 Advertising Design I 3 cr. hrs.
ART 226 Introduction to Fibers 3 cr. hrs.
ART 227 Introduction to Clay 3 cr. hrs.
ART 228 Introduction to Metal 3 cr. hrs.
ART 229 Introduction to Glass 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 236 Introduction to Graphics 3 cr. hrs.
ART 238 Introduction to Painting 3 cr. hrs.
Major Studio Area-Choose 15 credits from:
ART 326 Studio-Fibers 3 cr. hrs.
ART 327 Studio-Clay 3 cr. hrs.
ART 328 Studio-Metals 3 cr. hrs.
ART 329 Studio-Glass 3 cr. hrs.
ART 335 Studio-Photography 3 cr. hrs.
ART 336 Studio-Graphics 3 cr. hrs.
ART 338 Studio-Painting 3 cr. hrs.
Minor Studio Area-Choose 6 credits.
May choose from major studio courses listed above or the following:
ART 407 Introduction to Art Therapy 3 cr. hrs.
Choose 4 credits from:
ART 311 American Art to 1865 3 cr. hrs.
ART 312 American Art Since 1865 3 cr. hrs.
ART 314 Art of China, India and Japan 2 cr. hrs.
ART 318 Latin American Art 2 cr. hrs.
Electives: 6 cr. hrs.
Outside the Art Department with prior approval of advisor.
Required Supporting Courses 9 cr. hrs.
ANTH 100 Introduction to Anthropology 3 cr. hrs.
PHIL 235 Philosophy of the Arts 3 cr. hrs.
ENGL 231 The Short Story 3 cr. hrs.
ENGL 232 Contemporary Drama 3 cr. hrs.
ENGL 233 Introduction to Poetry 3 cr. hrs.
ENGL 234 Modern Novels 3 cr. hrs.
ENGL 341 European Literature 3 cr. hrs.
HUM 255 Arts and Ideas I 4 cr. hr.
HUM 256 Arts and Ideas II 4 cr. hrs.
IHUM 498 Senior Level Interdisciplinary Capstone-Humanities 2 cr. hrs.
Choose a foreign language course at intermediate or higher level 3 cr. hrs.
MUS 200 American Music 3 cr. hrs.
MUS 234 Music History and Literature I 4 cr. hrs.
MUS 235 Music History and Literature II 4 cr. hrs.
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.
SCTA 131 Design for the Theatre 3 cr. hrs.
SCTA 200 Introduction to Film Studies 3 cr. hrs.

Broad Area Art Major-Liberal Arts or Education Broad Area Art Major-
(no minor required) 56 Total Credits
Foundation Courses in Art: 20 cr. hrs.
ART 121 Design Foundation 3 cr. hrs.
ART 131 Drawing I 3 cr. hrs.
ART 132 Drawing II 3 cr. hrs.
ART 211 Western Art to 1500 3 cr. hrs.
ART 212 Art History Since 1500 3 cr. hrs.
ART 253 Art in the Schools 4 cr. hrs.
ART 485 Senior Seminar 1 cr. hr.
Required Courses Major Program: 36 cr. hrs.
Choose 18 credits from:
ART 225 Advertising Design I 3 cr. hrs.
ART 226 Introduction to Fibers 3 cr. hrs.
ART 227 Introduction to Clay 3 cr. hrs.
ART 228 Introduction to Metal 3 cr. hrs.
ART 229 Introduction to Glass 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 236 Introduction to Graphics 3 cr. hrs.
ART 238 Introduction to Painting 3 cr. hrs.
Choose 16 credits from:
ART 303 Advertising Design II 3 cr. hrs.
ART 309 Gallery Techniques 1-3 cr. hrs.
ART 320 Drawing from the Figure 3 cr. hrs.
ART 326 Studio-Fibers 3 cr. hrs.
ART 327 Studio-Clay 3 cr. hrs.
ART 328 Studio-Metals 3 cr. hrs.
ART 329 Studio-Glass 3 cr. hrs.
ART 335 Studio-Photography 3 cr. hrs.
ART 336 Studio-Graphics 3 cr. hrs.
ART 338 Studio-Painting 3 cr. hrs.
ART 407 Introduction to Art Therapy 3 cr. hrs.
ART 408 Art Therapy Group Process 3 cr. hrs.
Choose 2 credits from:
ART 311 American Art to 1865 3 cr. hrs.
ART 312 American Art Since 1865 3 cr. hrs.
ART 314 Art of China, India and Japan 2 cr. hrs.
ART 318 Latin American Art 2 cr. hrs.

Art Major-Liberal Arts (with minor or additional major)
Major Requirements 36 Total Credits
Foundation Courses in Art: 16 cr. hrs.
ART 121 Design Foundation 3 cr. hrs.
ART 131 Drawing I 3 cr. hrs.
ART 132 Drawing II 3 cr. hrs.
ART 211 Western Art to 1500 3 cr. hrs.
ART 212 Art History Since 1500 3 cr. hrs.
ART 485 Senior Seminar 1 cr. hr.
Required Courses: 20 cr. hrs.
Choose 12 credits from: ART 225 Advertising Design I 3 cr. hrs.
ART 226 Introduction to Fibers 3 cr. hrs.
ART 227 Introduction to Clay 3 cr. hrs.
ART 228 Introduction to Metal 3 cr. hrs.
ART 229 Introduction to Glass 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 236 Introduction to Graphics 3 cr. hrs.
ART 238 Introduction to Painting 3 cr. hrs.
Choose 8 credits from:
ART 303 Advertising Design II 3 cr. hrs.
ART 309 Gallery Techniques 1-3 cr. hrs.
ART 320 Drawing from the Figure 3 cr. hrs.
ART 326 Studio-Fibers 3 cr. hrs.
ART 327 Studio-Clay 3 cr. hrs.
ART 328 Studio-Metals 3 cr. hrs.
ART 329 Studio-Glass 3 cr. hrs.
ART 335 Studio-Photography 3 cr. hrs.
ART 336 Studio-Graphics 3 cr. hrs.
ART 338 Studio-Photography 3 cr. hrs.
ART 407 Introduction to Art Therapy 3 cr. hrs.
ART 408 Art Therapy Group Process 3 cr. hrs.

Art Minor: 24 Total Credits
Foundation Courses in Art: 9 cr. hrs.
Choose 9 credits from:
ART 121 Design Foundation 3 cr. hrs.
ART 131 Drawing I 3 cr. hrs.
ART 211 West Art to 1500 3 cr. hrs.
ART 212 West Art Since 1500 3 cr. hrs.
Electives in Art: 6 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.
ART 226 Introduction to Fibers 3 cr. hrs.
ART 227 Introduction to Clay 3 cr. hrs.
ART 228 Introduction to Metal 3 cr. hrs.
ART 229 Introduction to Glass 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 236 Introduction to Graphics 3 cr. hrs.
ART 238 Introduction to Painting 3 cr. hrs.
Select from any Art courses: 9 cr. hrs.
Biology (BIOL)
Department of Biology
College of Arts and Sciences

414 Agriculture Science Hall
(715) 425-3591

Karen Klyczek-Chair, Mark Bergland, Clarke Garry, Douglas Johnson, Timothy Lyden, E. Katherine Miller, Bradley Mogen, Kim Mogen, Grace Thornhill, John Wheeler

The Biology Department offers a 34-credit major for Liberal Arts and Education majors, and a 22-credit minor. A degree with a Biology major also requires completion of a minor and additional supporting courses in Chemistry, Mathematics, and Physics.

General Education Requirements:
BA and BS Liberal Arts majors as listed on page 34-35.
BS Education majors as listed on page 47-48.
Courses in the major or required supporting courses may be double counted to satisfy the General Education science requirements. Therefore, the total General Education credit hour requirement is reduced by the courses that can be double-counted.

Biology Major-Liberal Arts and Education: 34 Total Credits
Core Requirements: 21 cr. hrs.
BIOL 150 General Biology 3 cr. hrs.
BIOL 110 Freshman Colloquium in Biology 1 cr. hr.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 350 Genetics and Evolution (writing intensive) 3 cr. hrs.
BIOL 360 Ecology (writing intensive) 3 cr. hrs.
BIOL 410 Senior Colloquium in Biology 1 cr. hr.
BIOL 481 Seminar (Liberal Arts majors) 1 cr. hr.
or BIOL 471 Laboratory Experiences (Education majors)
Directed Electives: 13 cr. hrs.
Choose from any Biology courses except BIOL 253
Required Supporting Courses: 21-22 Total Credits
CHEM 111,112 General Chemistry I and II
CHEM 116,117 General Chemistry Lab I and II 10 cr. hrs.
PHYS 151,156 General Physics I and General Physics Lab I 5 cr. hrs.
MATH 147 College Algebra and Trigonometry 3 cr. hrs.
Liberal Arts majors also choose one from:
MATH 216 Elementary Statistical Concepts 3 cr. hrs.
MATH 226 Fundamentals of Statistics 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
Education majors also take:
GEOL 101,102 Introductory Geology and Introductory Geology Lab 4 cr. hr.

Biology Minor: 22 Total Credits
Required Courses: 18 cr. hr.
BIOL 150 General Biology 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 350 Genetics and Evolution (writing intensive) 3 cr. hrs.
BIOL 360 Ecology (writing intensive) 3 cr. hrs.
Directed electives: 4 cr. hr.
Choose from any other Biology courses except BIOL 253
The Biotechnology major is an interdisciplinary program that is focused on the molecular basis of life processes and the techniques utilized to both study and control these processes under in vivo and in vitro conditions. The Biotechnology curriculum draws upon the expertise and course offerings of the participating departments: Biology, Chemistry, Animal and Food Science, and Plant and Earth Science. Students complete core programs in Biology and Chemistry, which lead to minors in both areas, and a 33-semester hour, interdepartmental course requirement. The Biotechnology major is designed to provide those students who are interested in pursuing careers at the interface of biology and chemistry with the academic background required to either secure entry level positions in the biotechnology industry or to continue their education in graduate or professional schools. A student may elect to complete a B.S. degree in Biotechnology in either the College of Arts and Sciences, (715) 425-3777, or the College of Agriculture, Food and Environmental Sciences (715) 425-3841.

General Education Requirements:
- BA and BS Liberal Arts majors as listed on pages 34-35.
- BS Education majors as listed on pages 47-48.

Courses in the major or required supporting courses may be double counted to satisfy the General Education science requirements. Therefore, the total General Education credit hour requirement is reduced by the courses that can be double-counted.

Biotechnology Major: 71 Total Credits

Core Requirements: 41 cr. hrs.
- Biology Core 19 cr. hrs.
- BIOL 150 General Biology 3 cr. hrs.
- BIOL 210 General Botany 3 cr. hrs.
  or BIOL 230 General Zoology
- BIOL 240 Cell and Molecular Biology 3 cr. hrs.
- BIOL 324 Microbiology 4 cr. hr.
- CHEM 111 General Chemistry I 4 cr. hrs.
- CHEM 112 General Chemistry II 4 cr. hr.
- CHEM 116 General Chemistry Lab I 1 cr. hr.
- CHEM 117 General Chemistry Lab II 1 cr. hr.
- CHEM 231 Organic Chemistry I 3 cr. hrs.
- CHEM 232 Organic Chemistry II 3 cr. hrs.
- CHEM 236 Organic Chemistry Lab I 1 cr. hr.
- CHEM 237 Organic Chemistry Lab II 1 cr. hr.
- CHEM 251 Analytical Chemistry 2 cr. hrs.
- CHEM 256 Analytical Chemistry Lab 2 cr. hrs.

Interdepartmental Course Requirements 30 cr. hrs.
Required Courses 22 cr. hrs.
FDSC 335 Food Microbiology 4 cr. hrs.
FDSC 460 Fermentation Technology 3 cr. hrs.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Lab (writing intensive) 1 cr. hr.
HORT 369 Plant Tissue Culture: Theory and Practice 3 cr. hrs
or BIOL 463 Animal Cell Culture
BIOL 451 Molecular Biology 4 cr. hrs.
BIOT 480 Biotechnology Seminar 1 cr. hr.

Directed Electives: 8 cr. hrs.
Six credits must be at the 300/400 level.
Four credits of internship may be substituted for the 300/400 level course requirement.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 260 Animal Physiology 4 cr. hr.
ANSC 341 Biometrics 3 cr. hrs.
ANSC 346 Principles of Animal Breeding (writing intensive) 3 cr. hrs.
ANSC 447 Endocrinology 2 ANSC 448 Reproductive Physiology 3 cr. hrs.
ANSC 490 Independent Study in Animal Science 1-3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
or BIOL 230 General Zoology
BIOL 295 Laboratory Research Experience 2 cr. hrs.
BIOL 314 Plant Pathology 3 cr. hrs.
BIOL 320 Plant Physiology 3 cr. hrs.
BIOL 341 Anatomy and Physiology I 4 cr. hrs.
BIOL 342 Anatomy and Physiology II 4 cr. hrs.
BIOL 345 Immunology 3 cr. hrs.
BIOL 353 Histology 4 cr. hrs.
BIOL 360 Ecology (writing intensive) 3 cr. hrs.
BIOL 495 Undergraduate Research 3 cr. hrs.
BIOL 499 Independent Study 1-3 cr. hrs.
BIOL 463 Animal Cell Culture 3 cr. hrs.
or HORT 369 Plant Tissue Culture: Theory and Practice
CHEM 295 Introduction to Undergraduate Research 1 cr. hr.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 340 Physical Chemistry of Biological Systems 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 452 Instrumental Analysis 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.
FDSC 112 Introduction to Food Science 3 cr. hrs.
FDSC 302 Dairy Manufacturing II 3 cr. hrs.
FDSC 312 Food Processing 4 cr. hrs.
FDSC 360 Food Chemistry 3 cr. hrs.
FDSC 461 Food Analysis 4 cr. hrs.
FDSC 490 Independent Study in Food Science 1-3 cr. hrs.
HORT 161 Introduction to Plant Science 3 cr. hrs.
HORT 169 Introduction to Horticulture 3 cr. hrs.
HORT 200 Plant Propagation 3 cr. hrs.
AGRN 263 Forage Crop Production 3 cr. hrs.
AGRN 410 Plant Breeding and Crop Improvement (writing intensive) 3 cr. hrs.
AGRN 435 Crop Physiology 4 cr. hrs.
AGRN 490 Independent Study in Agronomy 1-3

Required Supporting Courses 14 cr. hrs.
MATH 166 Calculus I 4 cr. hrs.
Either sequence A or B below:

A. PHYS 151 General Physics I 4 cr. hrs.
PHYS 152 General Physics II 4 cr. hrs.
PHYS 156 General Physics Laboratory I 1 cr. hr.
PHYS 157 General Physics Laboratory II 1 cr. hr.

B. PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hrs.
PHYS 162 General Physics II 4 cr. hrs.
Business Administration
Department of Business Administration
College of Business and Economics

124 South hall
(715) 425-3335
Fax: (715) 425-0707

Jacque Foust-Chair, Charles Corcoran, Brian Huffman, Claire Kilian, Darryl Miller, Douglas Ohmer, Reza Rahgozar, Ellen Schultz-freshman and sophomore advisor.

Students majoring in Business Administration have varied opportunities to select a program to meet specific interests. One choice is to complete a Business Administration degree with a minor or double major. Another is to pursue a Broad Area Business Administration degree with an option in Marketing, Management, or Finance. A minor is not required with the Broad Area Major in Business Administration. Overall, one-half of the credits required for graduation with a degree in Accounting or Business must be taken outside of the College of Business and Economics. Fifty percent of the business credits must be earned at the College of Business and Economics at UW-River Falls.

General Education Requirements as listed on pages pages 44-45.

The general education mathematics requirement for business majors can be met by taking ECON/MNGT 205-Quantitative Analysis, MATH 156 Calculus for Business and Social Sciences, or MATH 166-Calculus I.

Business Administration Major (with a minor or double major): 45-48 Total Credits
Lower Division 21-24 cr. hrs.
Required of all majors before enrolling in any upper level division courses.
ECON 201 Principles of Microeconomics 3 cr. hrs.
ECON 202 Principles of Macroeconomics 3 cr. hrs.
ACCT231 Principles of Accounting I 3 cr. hrs.
ACCT232 Principles of Accounting II 3 cr. hrs.
MNGT 265 The Computer in Business 3 cr. hrs.
ECON 226 Introduction to Statistics 3 cr. hrs.
or MATH 226 Introduction to Statistics
BLAW 265 Business Law I 3 cr. hrs.
SCTA 116 Business and Professional Communication (waived if taken as GenEd) 3 cr. hrs.
or ENGL 266 Business Writing
Upper Division 24 cr. hrs.
MNGT 300 Management and Organizational Behavior 3 cr. hrs.
MKTG 310 Principles of Marketing 3 cr. hrs.
FINC 345 Managerial Finance 3 cr. hrs.
ECON 326 Statistical Methods for Economics and Business 3 cr. hrs.
or MNGT 326 Statistical Methods for Economics and Business
MNGT 361 Operations Management 3 cr. hrs.
MNGT 485 Senior Seminar 3 cr. hrs.
Business Electives: 6 cr. hrs.
Courses 300 level or higher from MKTG, MNGT or FINC, with the exception of FINC 210

Business-Broad Area Major (with an option, no minor required)
Lower and Upper Division Courses listed above 45-48 cr. hrs.
Finance Option 66-69 Total Credits
FINC 347 Financial Institutions 3 cr. hrs.
FINC 348 Investments 3 cr. hrs.
FINC 446 Intermediate Managerial Finance 3 cr. hrs.
Directed Electives: 12 cr. hrs.
Minimum of 6 credits must be in Finance
ACCT 321 Intermediate Accounting I
ACCT 322 Intermediate Accounting II
ACCT 346 Managerial Cost
ECON 302 Intermediate Macroeconomics
MNGT 318 Operations Research/Management Science
FINC 210 Personal Finance
FINC 314 Principles of Insurance
FINC 342 International Finance
FINC 379 Internship-Finance
FINC 389 Special Topics in Finance
FINC 448 Portfolio Management
Business Electives:
MNGT or MKTG courses 300 level or above 6 cr. hrs.

Management Option 72-75 Total Credits
Lower and Upper Division Courses listed above: 45-48 cr. hrs. Business Electives: Courses 300 level or higher from
MKTG, MNGT or FINC, with the exception of FINC 210 18 cr. hrs.
Support Electives: 9 cr. hrs.
Select from approved list in consultation with advisor.
Students pursuing the Management Option are encouraged to select a specialization either in international business, human resources or operations. Business electives and support electives should support this specialization. Suggested business courses are:
International:
FINC 342 International Finance
MNGT 355 International Business
MNGT 380 International Business Seminar
Human Resources:
MNGT 320 Human Resource Management
MNGT 324 Labor Economics
MNGT 480 Human Resource Management Seminar
Operations:
MNGT 316 Managerial Economics
MNGT 318 Operations Research
MNGT 350 Decision Making
MNGT 365 Management Information Systems

Marketing Option 72-75 Total Credits
Lower and Upper Division Courses listed above 45-48 cr. hrs. Marketing Electives: 18 cr. hrs.
choose from the following
MKTG 312 Consumer Behavior
MKTG 325 Sales Effectiveness
MKTG 334 Direct Marketing
MKTG 340 Services Marketing
MKTG 379 Internship-Marketing
MKTG 389 Special Topics in Marketing
MKTG 352 Business to Business Marketing
MKTG 445 Marketing Strategy
MKTG 355 International Marketing
MKTG 499 Independent Study
MKTG 365 Marketing Research
Support Electives: 9 cr. hrs.
choose from the following
ECON 316 Managerial Economics
POLS 256 Public Policymaking
ECON 340 International Trade
POLS 260 International Relations
ECON 342 International Finance
PSYC 265 Social Psychology
GEOG 250 Cartography I
PSYC 305 Learning and Motivation
MNGT 310 Culture and Business
MNGT 330 Managing Workplace Diversity
PSYC 310 Memory and Thinking
MNGT 389 Special Topics in Management: Multi-Media (only)
PSYC 320 Psychology of Personality
PSYC 336 Developmental Psychology: Adulthood and Aging
SCTA 306 Nonverbal Communication
PSYC 365 Individual and Group Processes
SCTA 311 Persuasion
SCTA 316 Organizational Communication

Business Administration Minor: 24 Total Credits
(Prerequisites: ECON 201, 202, 226)
Required Courses 15 cr. hrs.
ACCT201 Survey of Accounting 3 cr. hrs.
(or ACCT231 and ACCT232, Principles of Accounting I and II)
BLAW 265 Business Law I 3 cr. hrs.
MNGT 265 The Computer in Business 3 cr. hrs.
FINC 345 Managerial Finance 3 cr. hrs.
MNGT 300 Management and Organizational Behavior 3 cr. hrs.
MKTG 310 Principles of Marketing 3 cr. hrs.
Business Electives: 9 cr. hrs.
Courses 300 level or higher from
MKTG, MNGT or FINC, with the exception of FINC 210
The Chemistry Department offers several options for chemistry majors, all of which are based on a core curriculum with additional requirements based on each option.

1. The Bachelor of Science regular option chemistry major is designed for students who desire a general education in chemistry as a background for careers in many fields such as polymer science, environmental analysis, industrial chemistry, materials science, various fields related to medical science, etc. This consists of 35 credit hours distributed among the major fields of chemistry.

2. The ACS-Approved regular option chemistry major is offered for those students who wish to pursue a more intensive program in chemistry approved by the American Chemical Society. This program includes the courses in the Bachelor of Science chemistry major and additional advanced courses. It is particularly recommended for students who intend to go to graduate school or work in the chemical industry. A course in computer use or programming and one year of foreign language are strongly recommended.

3. The biochemistry options are for those students who wish to pursue a career in biotechnology, the medical sciences or who desire a strong background in the chemistry of biological systems. The biochemistry program may be based on the Bachelor of Science major or the ACS Approved major. The ACS-Approved major is recommended for the student who plans to attend graduate school.

4. The education option chemistry major is designed for prospective secondary school teachers. The curriculum is planned so as to give the student (1) a broad general education, (2) specialized preparation in chemistry with a minor in a supporting field and (3) professional training necessary for effective teaching.

5. The polymer option is designed for those students who wish to pursue a career in the chemical industry working with new materials for applications in aerospace, electronics, medicine, building, and transportation industries. Students completing this option will be prepared to directly enter the chemical industry or go on to graduate school in areas of study such as polymers or material science. The polymer option is based on the ACS-Approved major. Note: Substitution of other courses for degree requirements is possible upon application and approval by the department. This is on a case-by-case basis and particularly may affect students who change to a chemistry major or who transfer to UW-RF. Students should confer with their advisor and/or the department chair.

The Department of Chemistry at UW-RF is approved by the American Chemical Society. Students who are interested in pursuing advanced training in chemistry may obtain an ACS-Approved degree by taking several additional chemistry courses. Within the required supporting courses, the calculus-based physics courses 161, 162, 101, 102 are required for the ACS-Approved Option.

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.
Courses in the major or required supporting courses may be double counted to satisfy the General Education science requirements. Therefore, the total General Education credit hour requirement is
reduced by the courses that can be double-counted.

Core Requirements for all chemistry major programs: 21 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hrs.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 112 General Chemistry II 4 cr. hrs.
CHEM 117 General Chemistry Lab II 1 cr. hr.
CHEM 231 Organic Chemistry I 3 cr. hrs.

Core Requirements for all chemistry major programs
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
CHEM 480 Chemical Communications and Research (writing intensive) 1 cr. hr.
Required Supporting Courses: 14-21 cr. hrs.
MATH 166 Calculus I 4 cr. hrs.
MATH 167 Calculus II 4 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
Choose one of the following two physics series A. or B.: 10 cr. hrs.
A. PHYS 151 General Physics I
PHYS 152 General Physics II
PHYS 156 General Physics Laboratory I
PHYS 157 General Physics Laboratory II
B. PHYS 161 General Physics I
PHYS 162 General Physics II
PHYS 101 General Physics Laboratory I
PHYS 102 General Physics Laboratory II

Chemistry Major- Liberal Arts: 35-37 Total Credits
Core Requirements 21 cr. hrs.
Required Supporting Courses (not counted in total for major) 14-21 cr. hrs.
Regular Option Required Courses: 11 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
Directed Electives for the Regular Option: 3 cr. hrs.
Choose from:
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 432 Advanced Organic Chemistry 3 cr. hrs.
CHEM 452 Instrumental Analysis 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.
Biochemistry Option
Required Courses: 16 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
CHEM 495 Undergraduate Research 1 cr. hr.
Choose option A. or B. below: 6 cr. hrs.
A. CHEM 341 Chemical Thermodynamics and Kinetics
CHEM 342 Molecular Structure and Spectroscopy
B. CHEM 340 Physical Chemistry of Biological Systems
CHEM 432 Advanced Organic Chemistry
If option B. is chosen, MATH 167 and 266 are not required.
Additional required supporting courses, biochemistry option only: 6 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 350 Genetics and Evolution (writing intensive) 3 cr. hrs.

Chemistry Major- Education

Major Requirements - Secondary Education 35 Total Credits
Core Requirements: 21 cr. hrs.
Required Supporting Courses: (not counted in total for major) 21 cr. hrs.
Secondary Education Option
Required Courses: 14 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.

Chemistry Major ACS-Approved: 42-47 Total Credits
Core Requirements 21 cr. hrs.
Required Supporting Courses (not counted in total for major) 21 cr. hrs.
ACS Regular Option
Required Courses: 19 cr. hrs.
CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. hrs.
CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. hr.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.
Directed Electives for the Regular Option-choose from: 3 cr. hrs.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 416 Polymer Laboratory 1 cr. hr.
CHEM 432 Advanced Organic Chemistry 3 cr. hrs.
CHEM 452 Instrumental Analysis 3 cr. hrs.
CHEM 489 Special Topics in Chemistry .5-3 cr. hrs.

ACS Biochemistry Option
Required Courses: 21 cr. hrs.
CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. hrs.
CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. hr.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.

Additional required supporting courses, biochemistry option only: 10 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 350 Genetics and Evolution (writing intensive) 3 cr. hrs.
BIOL 451 Molecular Biology 4 cr. hr.

ACS Polymer Option
Required Courses: 26 cr. hrs.
Option I
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
or CHEM 495 Undergraduate Research 1 cr. hr.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 416 Polymer Laboratory 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.
Option II
CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. hrs.
CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. hr.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. hr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. hr.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 416 Polymer Laboratory 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.

Chemistry Major - Dual Degree (Engineering)
This major is awarded jointly with a B.S. in engineering after the student has successfully completed a three-year program at UW-River Falls with a minimum grade point average of 3.0 and a two-year program at either UW Madison or the University of Minnesota.

Required courses 23 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
CHEM 231 Organic Chemistry I 3 cr. hrs.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. hrs.
CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. hr.
CHEM 251 Analytical Chemistry 2 CHEM 256 Analytical Chemistry Lab 2 cr. hrs.

Credits transferred from Engineering School 30 cr. hrs.

Required supporting courses at UW-RF 34 cr. hrs.
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 211 Scientific Programming 3 cr. hrs.
PHYS 264 General Physics 4 cr. hr.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 331 Differential Equations 3 cr. hrs.
PHYS 211 Scientific Programming 3 cr. hrs.

Chemistry Minor - Liberal Arts and Education Minor: 22-24 Total Credits
Required Courses: 10 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.

Directed electives: Liberal Arts Minor: 12 cr. hrs.
or Secondary Education Minor: 14 cr. hrs.
At least one course must be at the 300 level or above.
CHEM 231 Organic Chemistry I 3 cr. hrs.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 340 Physical Chemistry of Biological Systems 3 cr. hrs.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 342 Molecular Structure and Spectroscopy 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. hr.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 416 Polymer Laboratory 1 cr. hr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. hrs.
CHEM 432 Advanced Organic Chemistry 3 cr. hrs.
CHEM 452 Instrumental Analysis 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
CHEM 495 Undergraduate Research 1 cr. hr.
Criminal Justice (CJ)
Department of Sociology, Anthropology, and Criminal Justice
College of Arts and Sciences

326 Kleinpell Fine Arts Building
(715) 425-3992 cr. hrs.
Web Site: www.uwrf.edu/sociology/

Brian E. Copp - Chair, Tricia Davis, Jean Hector Faley, Clifford Mottaz, Timothy E. Nissen, Edward Robins, Rich Wallace

Minor in Criminal Justice-Sociology Major: 24 Total Credits
Required Courses: 12 cr. hrs.
SOCI 100 Introduction to Sociology (counts 3 cr. hrs. in Gen. Ed.)
or ANTH 100 Introduction to Anthropology (counts 3 cr. hrs. in Gen. Ed.)
CJ 202 Introduction to Criminal Justice 3 cr. hrs.
CJ 320 Juvenile Delinquency 3 cr. hrs.
CJ 322 Criminology 3 cr. hrs.
CJ 430 Trends and Issues in Incarceration 3 cr. hrs.
or CJ 435 Alternatives to Incarceration
Directed Electives: 12 cr. hrs.
CJ 376 Criminal Justice Certification Internship 6
or CJ 379 Criminal Justice Internship or 6-12 cr. hrs.
Choose 6 credits from the following courses:
In no case may a course be double counted for credit in both the CJ minor and Sociology major.
SOCI 218 Deviant Behavior 3 cr. hrs.
CJ 310 Gangs in the U.S. 3 cr. hrs.
SOCI 340 Sociology of Rural Life 3 cr. hrs.
SOCI 345 Sociology of Urban Life 3 cr. hrs.
SOCI 445 Power and Inequality 3 cr. hrs.
PSYC 325 Abnormal Psychology 3 cr. hrs.
POLS 225 Introduction to Public Administration 3 cr. hrs.
POLS 253 State and Local Politics 3 cr. hrs.
POLS 354 Women and the Law 3 cr. hrs.
POLS 416 Constitutional Law 3 cr. hrs.

Minor in Criminal Justice-Non-Sociology Major: 24 Total Credits
Required Courses: 18 cr. hrs.
SOCI 100 Introduction to Sociology (counts 3 cr. in Gen. Ed.)
or ANTH 100 Introduction to Anthropology (counts 3 cr. in Gen. Ed.)
SOCI 200 Sociological Inquiry 3 cr. hrs.
CJ 202 Introduction to Criminal Justice 3 cr. hrs.
CJ 320 Juvenile Delinquency 3 cr. hrs.
CJ 322 Criminology 3 cr. hrs.
CJ 430 Trends and Issues in Incarceration 3 cr. hrs.
or CJ 435 Alternatives to Incarceration
SOCI 445 Power and Inequality 3 cr. hrs.
Directed Electives: 6 cr. hrs.
SOCI 208 Sociology of Diversity 3 cr. hrs.
SOCI 225 Sociology of Race and Ethnicity 3 cr. hrs.
or ANTH 225 Sociology of Race and Ethnicity
SOCI 218 Deviant Behavior 3 cr. hrs.
SOCI 240 Social Problems 3 cr. hrs.
CJ 310 Gangs in the U.S. 3 cr. hrs.
SOCI 330 Social Organizations 3 cr. hrs.
CJ 376 Law Enforcement Certification Internship 6
CJ 379 Criminal Justice Internship 6-12 cr. hrs.
SOCI 410 Social Psychology 3 cr. hrs.
Coaching
Department of Health and Human Performance
College of Education and Professional Studies

111 Karges Center
(715) 425-3705

Chair-Connie Foster, Debra Allyn, Betsy Barrett, Richard Bowen, Kevin Bullis, Gary Eloranta, Patti Ford, Steve Freeman, Tom Journell, Douglas Naylor, John O'Grady, Faye Perkins, Robert Ritzer, Susan Tarr, Jim Theis, Karla Zhe

Coaching Minor: 24 Total Credits
Required Courses: Prerequisite 18 cr. hrs.
SFED 200 First Aid and Basic Life Support 3 cr. hrs.
HEAL 262 Human Anatomy and Physiology (or HEAL 263 and 366) 3 cr. hrs.
PED 213 Care and Prevention of Athletic Injury 2 cr. hrs.
PED 354 Biomechanics 3 cr. hrs.
PED 363 Psychology of Coaching 2 cr. hrs.
PED 465 Scientific Principles of Conditioning 2 cr. hrs.
PED 472 Coaching Practicum 3 cr. hrs.
Coaching Theory Classes: 6 cr. hrs.
Required to take at least two
PED 352 Coaching Women's Gymnastics 2 cr. hrs.
PED 356 Tennis Coaching 2 cr. hrs.
PED 358 Track Coaching 2 cr. hrs.
PED 359 Volleyball Coaching 2 cr. hrs.
PED 364 Wrestling Coaching 2 cr. hrs.
PED 365 Football Coaching 2 cr. hrs.
PED 366 Swimming Coaching 2 cr. hrs.
PED 367 Basketball Coaching 2 cr. hrs.
PED 368 Ice Hockey Coaching 2 cr. hrs.
PED 369 Baseball/Softball Coaching 2 cr. hrs.
Students may satisfy this 6 cr. requirement by choosing a maximum of 2 cr. from the following or taking an additional coaching theory class:
PED 166 Football Officiating 1 cr. hr.
PED 167 Basketball Officiating 1 cr. hr.
PED 168 Officiating Women's Gymnastics 1 cr. hr.
PED 351 Coaching Young Athletes 2 cr. hrs.
Summary of Colleges, Departments and Majors

About this page

- Course listings and program requirements reflect that of the PRINTED UNDERGRADUATE CATALOG for 2001 through 2003 (issued June 2001).
- Program modifications may have occurred that are NOT reflected in this on-line document.
- Please consult with your academic advisor regarding academic requirements.

College of Agriculture, Food and Environmental Science
College of Arts and Science
Pre-Professional Curricula
College of Business and Economics
College of Education and Professional Studies
Communicative Disorders (COMD)
Department of Communicative Disorders
College of Education and Professional Studies

B31 Wyman Education Building
(715) 425-3801
Web Site: http://www.uwrf.edu/comm-dis/

Paul Hayden-Chair, Lori Burgess, Gary Cottrell, Mike Harris, Tom Jensen, Nan Jordahl, Marie Stadler, Deirdre Worrell

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Communicative Disorders Major - Liberal Arts and Education: 39 Total Credits
Required Courses: 36 cr. hrs.
COMD 262 Speech Systems 4 cr. hr.
COMD 263 Phonetics 3 cr. hrs.
COMD 264 Speech Science 3 cr. hrs.
COMD 275 Practicum: Observation/Discussion 1 cr. hr.
COMD 350 Articulatory and Phonological Disorders 3 cr. hrs.
COMD 360 Introduction to Audiology 4 cr. hr.
COMD 375 Case Discussions: Speech/Language (writing intensive) 2 cr. hrs.
COMD 460 Voice Disorders 3 cr. hrs.
COMD 461 Language Development and Disorders 4 cr. hr.
COMD 463 Behavior Modification/Stuttering 3 cr. hrs.
COMD 466 Aural Rehabilitation 3 cr. hrs.
COMD 379 Clinical Experience Internship 3 cr. hrs.
Directed Electives: 3 cr. hrs.
COMD 160 Introduction to Communicative Disorders 3 cr. hrs.
COMD 163 Communicative Disorders for the Elementary Teacher 3 cr. hrs.
COMD 331 Fear of Speaking 3 cr. hrs.
COMD 351 Cleft Palate/Orofacial Anomaly 3 cr. hrs.
COMD 361 Speech and Language for Hearing Impaired 3 cr. hrs.
COMD 364 Aphasia 3 cr. hrs.
COMD 370 Practicum: Fear of Speaking 3 cr. hrs.
COMD 450 Infant Stimulation 3 cr. hrs.
COMD 451 Augmentative/Alternative Communication Systems 3 cr. hrs.
COMD 452 Dysphagia/Rehabilitation 3 cr. hrs.
COMD 453 Alaryngeal Speech 3 cr. hrs.
COMD 462 Language Appraisal and Intervention 3 cr. hrs.
COMD 465 Current Issues/Research 2 cr. hrs.
COMD 468 Screening and Assessment Procedures 3 cr. hrs.
COMD 469 American Sign Language 3 cr. hrs.

Professional Education Requirements: 18-29 cr. hrs.
TED 211 Educational Psychology: Elementary Education 5
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
or TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.
TED 439 Techniques of Middle/Secondary Education: Communicative Disorders 3 cr. hrs.
TED 475 Student Teaching: K-12 1-12 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.

Communicative Disorders Minor: Three different emphases 22 Total Credits
Required Courses: 4 cr. hrs.
COMD 160 Introduction to Communicative Disorders 3 cr. hrs.
or COMD 163 Comm Disorders for Elementary Teacher (School Age Emphasis)
COMD 275 Practicum: Observation/Discussing 1 cr. hr.
   COMD Electives-Choose 3 courses from:
   COMD 262 Speech Systems 4 cr. hr.
   COMD 263 Phonetics 3 cr. hrs.
   COMD 350 Articulatory and Phonological Disorders 3 cr. hrs.
   COMD 351 Cleft Palate/Orofacial Anomaly 3 cr. hrs.
   COMD 360 Introduction to Audiology 4 cr. hr.
   COMD 451 Augmentative/Alternative Communication Systems 3 cr. hrs.
   COMD 461 Language Development and Disorders 4 cr. hr.
   COMD 462 Language Appraisal and Intervention 3 cr. hrs.
   COMD 466 Aural Rehabilitation 3 cr. hrs.
Early Childhood Directed Electives: 9 cr. hrs.
Choose 3 courses from:
ENGL 250 Literature for Children 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
PSYC 201 Behavioral Statistics 3 cr. hrs.
PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. hrs.
PSYC 260 Behavior Modification 3 cr. hrs.
PSYC 305 Learning and Motivation 3 cr. hrs.
PSYC 310 Memory and Thinking 3 cr. hrs.
PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
TED 225 Developmental Learning Experiences of Young Children 3 cr. hrs.
TED 255 Reading Guidance for Children 3 cr. hrs.
TED 330 Infant Toddler Development 3 cr. hrs.
2. School Age Emphasis COMD Electives: 9 cr. hrs.
Choose 3 courses from:
COMD 262 Speech Systems 4 cr. hr.
COMD 263 Phonetics 3 cr. hrs.
COMD 331 Fear of Speaking 3 cr. hrs.
COMD 350 Articulatory and Phonological Disorders 3 cr. hrs.
COMD 351 Cleft Palate/Orofacial Anomaly 3 cr. hrs.
COMD 360 Introduction to Audiology 4 cr. hr.
COMD 451 Augmentative/Alternative Communication Systems 3 cr. hrs.
COMD 460 Voice Disorders 3 cr. hrs.
COMD 461 Language Development and Disorders 4 cr. hr.
COMD 462 Language Appraisal and Intervention 3 cr. hrs.
COMD 463 Behavior Modification/Stuttering 3 cr. hrs.
COMD 466 Aural Rehabilitation 3 cr. hrs.
School Age Directed Electives: 9 cr. hrs.
Choose 3 courses from:
COUN 410 Introduction to Counseling 3 cr. hrs.
ENGL 250 Literature for Children 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
PSYC 201 Behavioral Statistics 3 cr. hrs.
PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. hrs.
PSYC 260 Behavior Modification 3 cr. hrs.
PSYC 305 Learning and Motivation 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
TED 255 Reading Guidance for Children 3 cr. hrs.
PSYC 420 Introduction to Learning Disabilities 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.

Directed electives that are applicable for Learning Disability certification are COMD 461, PSYC 420 and TED 461

Choose 3 courses from:
COMD 262 Speech Systems 4 cr. hr.
COMD 263 Phonetics 3 cr. hrs.
COMD 331 Fear of Speaking 3 cr. hrs.
COMD 350 Articulatory and Phonological Disorders 3 cr. hrs.
COMD 360 Introduction to Audiology 4 cr. hr.
COMD 364 Aphasia 3 cr. hrs.
COMD 451 Augmentative/Alternative Communication Systems 3 cr. hrs.
COMD 452 Dysphagia/Rehabilitation 3 cr. hrs.
COMD 460 Voice Disorders 3 cr. hrs.
COMD 463 Behavior Modification/Stuttering 3 cr. hrs.
Adult Directed Electives: 9 credits
choose 3 courses from the following:
COUN 410 Introduction to Counseling 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
PSYC 201 Behavioral Statistics 3 cr. hrs.
PSYC 260 Behavior Modification 3 cr. hrs.
PSYC 305 Learning and Motivation 3 cr. hrs.
PSYC 310 Memory and Thinking 3 cr. hrs.
PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SOCI 315 Sociology of Later Life 3 cr. hrs.
SOCI 300 Research Methods (writing intensive) 3 cr. hrs.
or SOWK 300 Research Methods
The Conservation major is designed to meet the academic needs of students interested in a career dealing with the natural environment. The major has the flexibility to accommodate interests in natural resource management, soil and water conservation, environmental education, pollution control, environmental regulations and law enforcement, and the like, depending on the students course selection of directed electives.

General Education Requirements as listed on pages pages 26-27 with the following exceptions:
Social and Behavioral: ESM 105 required
Sciences: GEOL 101, CHEM 111, 116, and BIOL 100 required.

Conservation Major
Conservation Core 47-49 cr. hrs.
ESM 109 Introduction to Forestry 2 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. hrs.
ESM 270 Internship I 2-4 cr. hr.
ESM 303 Environmental Policies and Administration 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 343 Woodlot Management 3 cr. hrs.
ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
ESM 363 GIS Application in Resource Management 3 cr. hrs.
ESM 485 Seminar in Resource Management 1 cr. hr.
SOIL 210 Introductory Soil Science 3 cr. hrs.
SOIL 440 Soil and Water Conservation 4 cr. hr.
AGEC450 Introduction to Natural Resource Economics 3 cr. hrs.
BIOL 344 Wildlife Biology 4 BIOL 360 Ecology 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
or BIOL 230 General Zoology or 3 cr. hrs.
Required Supporting Courses 14 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 117 General Chemistry Laboratory II 1 cr. hr.
ENGL 367 Technical Writing 3 cr. hrs.
AGED 202 Leadership and Group Dynamics 3 cr. hrs.
or SCTA 208 Problem Solving in Small Group Communication
AGEC230 Agriculture Economics I 3 cr. hrs.
or ECON 201 Principles of Microeconomics
Directed Electives: 15-17 cr. hrs.
ACCT201, 231, 232, AGEC 320, 345, AGED 202, AGEN 325, 333, 365, AGRN 345, 462, ANSC
Conservation Minor: 22 Total Credits

ESM 105 Introduction to Environmental Studies 3 cr. hrs.
ESM 109 Introduction to Forestry 2 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
ESM 343 Woodlot Management 3 cr. hrs.
ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
SOIL 210 Introductory Soil Science 3 cr. hrs.
SOIL 440 Soil and Water Conservation 4 cr. hr.

Select one:
ECON 226, MATH 226, ANSC 341
Select one: ESM 307 or any other Diversity Course
General Education Requirements as listed on pages pages 44-45.

Computer Systems Major
Computer Science Option: 36 Total Credits
This option offers its graduates the common foundation for analysis and design of computer systems. Graduates will develop skills relevant to the analysis, design and implementation of sophisticated software/hardware systems and will have knowledge and skills of one or more computer systems, programming languages, and operating systems. Graduates will be well prepared to assume responsible and challenging positions in the computing profession or for graduate work in the computer science field. This major is offered in the College of Arts and Sciences and students must meet College of Arts and Sciences requirements.

Required Courses: 28 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 241 Assembly Language 3 cr. hrs.
CPTS 351 Computer Organization 3 cr. hrs.
CPTS 361 Introduction to System Programming 3 cr. hrs.
CPTS 416 Structure of Programming Languages 3 cr. hrs.
CPTS 429 Operating Systems 3 cr. hrs.
CPTS 484 Seminar (writing intensive) 1 cr. hr.
Directed Electives: 8 cr. hrs.
To be selected from 200-400 CPTS courses in consultation with advisor
Required supporting math courses: 12 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.

Computer Information Systems Option: 36 Total Credits
This option offers its graduates the common foundation for analysis and design of information systems with an emphasis on computerizing information. Graduates will develop skills relevant to the analysis, design and implementation of sophisticated information systems and will have knowledge and skills of one or more programming languages, Database Management Systems, and analysis and design methodologies. Graduates will be well prepared to assume responsible and challenging positions in the information system profession or for graduate work in information systems. Students with this major in the College of Business and Economics must have a Business Administration minor or double major.
Required Courses: 28 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 241 Assembly Language 3 cr. hrs.
CPTS 323 Structured COBOL Programming 3 cr. hrs.
CPTS 333 Database Management Systems 3 cr. hrs.
CPTS 423 Introduction to Systems Analysis 3 cr. hrs.
CPTS 433 Design Analysis MIS 3 cr. hrs.
CPTS 484 Seminar (writing intensive) 1 cr. hr.
Directed Electives: 8 cr. hrs.
To be selected from 200-400 CPTS courses in consultation with advisor
Required supporting math courses: 7-8 cr. hrs.
MATH 156 Calculus for Business and Social Science 3 cr. hrs
or MATH 166 Calculus I 4 cr. hr.

Management Information Systems Option: 36-37 Total Credits
This option offers its graduates the foundation of information systems and the inclusion of
management courses. Graduates will develop skills relevant to the analysis, design and
implementation of sophisticated information systems and will have a foundation in fundamental
management skills and practices. Graduates will be well prepared to assume responsible and
challenging positions in the management of information systems or for graduate work in a business
field. Students in MIS must have a Business Administration minor or double major.
Prerequisites: 9 cr. hrs.
ECON 205 Quantitative Analysis 3 cr. hrs.
or MNGT 205 Quantitative Analysis
MATH 156 Calculus for Business and Social Science
or MATH 166 Calculus I (meets general education math requirement)
ECON 226 Intro Statistics 3 cr. hrs.
or MATH 226 Fundamentals of Statistics
MNGT 265 The Computer in Business 3 cr. hrs.
Required Courses: 28 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 333 Database Management Systems 3 cr. hrs.
CPTS 423 Introduction to Systems Analysis 3 cr. hrs.
CPTS 484 Seminar (writing intensive) 1 cr. hr.
ACCT231 Principles of Accounting I 3 cr. hrs.
FINC 345 Principles of Managerial Finance 3 cr. hrs.
MNGT 361 Operations Management 3 cr. hrs.
MNGT 365 Management Information Systems 3 cr. hrs.
Directed Electives 8 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 323 Structured COBOL Programming 3 cr. hrs.
CPTS 325 Web Development II 3 cr. hrs.
CPTS 327 JAVA Programming 3 cr. hrs.
CPTS 343 Software Engineering 3 cr. hrs.
CPTS 361 Introduction to System Programming 3 cr. hrs.
CPTS 379 Internship Computer Science 3-12 cr. hrs.
CPTS 433 Design Analysis MIS 3 cr. hrs.
CPTS 441 Computer Networks 3 cr. hrs.
ACCT366 Accounting Systems 3 cr. hrs.
MNGT 316 Managerial Economics 3 cr. hrs.
MNGT 318 Operations Research/Management Science 3 cr. hrs.
MNGT 379 Internship
MNGT (limit of 3 credits total for business electives) 2-6
MNGT 389 Special Topics in Management (to be selected in consultation with advisor) .5-3

Education Option: 35 Total Credits
This option is designed to meet the certification requirements in the state of Wisconsin for secondary school computer science teachers.

Required Courses: 26 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 241 Assembly Language 3 cr. hrs.
CPTS 301 Computers and Modern Society (writing intensive) 2 cr. hrs.
CPTS 351 Computer Organization 3 cr. hrs.
CPTS 361 Introduction to System Programming 3 cr. hrs.
CPTS 416 Structure of Programming Languages 3 cr. hrs.

Directed Electives: 9 cr. hrs.
To be selected from 200-400 CPTS courses in consultation with advisor

Required supporting math courses: 7-8 cr. hrs.
MATH 156 Calculus for Business and Social Science 3 cr. hrs.
or MATH 166 Calculus I 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.

Computer Systems Minor
Computer Science Option: 24 Total Credits
Required courses: 18 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 241 Assembly Language 3 cr. hrs.
CPTS 351 Computer Organization 3 cr. hrs.

Directed electives: 6 cr. hrs.
To be selected from 200-400 CPTS courses in consultation with advisor

Required supporting math courses: 12 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.

Information Systems Option: 24 Total Credits
Required courses: 18 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 333 Database Management Systems 3 cr. hrs.
CPTS 423 Introduction to Systems Analysis 3 cr. hrs.

Directed electives: 6 cr. hrs.
To be selected from 200-400 CPTS courses in consultation with advisor

Required supporting math courses: 7-8 cr. hrs.
MATH 156 Calculus for Business and Social Science 3 cr. hrs.
MATH 166 Calculus I 3 cr. hrs.
MATH 236 Discrete Mathematics 4 cr. hr.
Management Information Systems Option: 24 Total Credits
Intended for students with an accounting or business administration major; students with other majors should select the Computer Information Systems minor.
Prerequisites: 9 cr. hrs.
ECON 205 Quantitative Analysis in Economics and business 3 cr. hrs.
or MNGT 205 Quantitative Analysis in Economics and business
or MATH 156 Calculus for Business and Social Science
or MATH 166 Calculus I (meets general education math requirement)
ECON 226 Intro Statistics 3 cr. hrs.
or MATH 226 Foundations in Statistics
MNGT 265 The Computer in Business 3 cr. hrs.
Required courses 24 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 333 Database Management Systems 3 cr. hrs.
CPTS 423 Introduction to Systems Analysis 3 cr. hrs.
MNGT 316 Managerial Economics 3 cr. hrs.
MNGT 318 Operations Research/Management Science 3 cr. hrs.
MNGT 365 Management Information Systems 3 cr. hrs.
Education Option 23 Total Credits
Required courses 20 cr. hrs.
CPTS 161 Programming I 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
CPTS 235 Object-Oriented Programming 3 cr. hrs.
CPTS 236 Data Structures 3 cr. hrs.
CPTS 241 Assembly Language 3 cr. hrs.
CPTS 351 Computer Organization 3 cr. hrs.
CPTS 301 Computers and Modern Society 2 cr. hrs.
Directed electives: 3 cr. hrs.
To be selected from 200-400 CPTS courses in consultation with advisor.
Required supporting math courses: 7-8 cr. hrs.
MATH 156 Calculus for Business and Social Science 3 cr. hrs.
or MATH 166 Calculus I
or 4 MATH 236 Discrete Mathematics 4 cr. hr.
General Education Requirements as listed on pages 26-27

Crop and Soil Science Major
Foundation Courses in Agriculture 12 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
Select one from:
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
FDSC 112 Introduction to Food Science 3 cr. hrs.

Major Requirements 64 Total Credits
Required Courses: 14 cr. hrs.
AGRN 263 Forage Crop Production 3 cr. hrs.
AGRN 266 Crop and Soybean Production 3 cr. hrs.
SOIL 311 Soil Fertility 4 cr. hr.
SOIL 440 Soil and Water Conservation 4 cr. hr.
Options (choose one):
Crop Science Option 43-45 cr. hrs.
AGRN 257 Genetics 3 cr. hrs.
AGRN 260 Plant and Seed Identification 2 cr. hrs.
AGRN 345 Weed Control 3 cr. hrs.
AGRN 410 Plant Breeding and Crop Improvement 3 cr. hrs.
AGRN 435 Crop Physiology 4 cr. hr.
AGRN 451 Integrated Pest Management 3 cr. hrs.
AGRN 485 Seminar in Agronomy 1 cr. hr.
ANSC 341 Biometrics 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
AGBI 252 Agricultural Biochemistry Laboratory Techniques 1 cr. hr.
BIOL 314 Plant Pathology 3 cr. hrs.
BIOL 333 Entomology 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
Select one course from the following:
AGRN 363 Precision Agricultural Technology 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
HORT 327 Vegetable Science and Production 4 cr. hr.
HORT 347 Fruit Science and Production 4 cr. hr.
HORT 455 Turfgrass Science and Management 3 cr. hrs.
SOIL 350 Pedology 4
Select one course from the following:
AGEC 355 Agricultural Marketing and Production 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 368 Professional Selling 3 cr. hrs.
Select one course from the following:
AGRN 267 Small Grain and Miscellaneous Crop Production 3 cr. hrs.
AGRN 363 Pasture Management 2 cr. hrs.
AGRN 462 Agricultural Ecology 2 cr. hrs.
Directed Electives 7-9 cr. hrs.

Soil Science Option 37-42 cr. hrs.
SOIL 325 Hydric Soils and Wetland Environments 3 cr. hrs.
SOIL 350 Pedology 4 cr. hr.
SOIL 460 Soil Physics 3 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
GEOL 102 Introductory Geology Lab 1 cr. hr.
ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
ENGL 367 Technical Writing 3 cr. hrs.
SCTA 211 Public Speaking 3 cr. hrs.
Select one course from the following:
AGRN 257 Genetics 3 cr. hrs.
AGRN 260 Plant and Seed Identification 2 cr. hrs.
AGRN 267 Small Grain and Miscellaneous Crop Production 3 cr. hrs.
AGRN 345 Weed Control 3 cr. hrs.
AGRN 363 Pasture Management 2 cr. hrs.
AGRN 435 Crop Physiology 4 cr. hr.
AGRN 462 Agricultural Ecology 2 cr. hrs.
Select two courses from the following:
GEOL 327 Geomorphology and Glacial Geology 4 cr. hr.
AGRN 451 Integrated Pest Management 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
BIOL 314 Plant Pathology 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.
BIOL 333 Entomology 3 cr. hrs.
Select one course from the following:
AGEC 320 Statistical Methods 3 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
PHYS 151 General Physics 4 cr. hr.
Dance Education (DANC)
Department of Health and Human Performance
College of Education and Professional Studies

111 Karges Center
(715) 425-3705
Web Site http://www.uwrf.edu/hhp/

Chair-Connie Foster, Debra Allyn, Betsy Barrett, Richard Bowen, Kevin Bullis, Gary Eloranta, Patti Ford, Steve Freeman, Tom Journell, Douglas Naylor, John O’Grady, Faye Perkins, Robert Ritzer, Susan Tarr, Jim Theis, Karla Zhe

The mission of the Department of Health and Human Performance is to provide leadership and education for a diverse student body in the areas of health, physical education, recreation, dance, and athletics. The Department is committed to promoting physical activity and healthy lifestyles throughout the lifespan, whether it be through providing opportunities for exceptional performance in athletics; for a holistic teaching approach in our physical education, health, dance, outdoor education and coaching curricula; for creative expression in Dance Theatre; or for recreational and leisure opportunities through activity courses and the Life Fitness Program.

Dance Education Minor: 22-24 Total Credits
Required Courses 22-24 cr. hrs.
DANC 100 History/Appreciation of Dance 3 cr. hrs.
DANC 107 Social Dance .5
DANC 110 Basic Jazz Dance .5
DANC 120 Fund. of Movement Through Dance 1 cr. hr.
DANC 150 Dance Improvisation 1 cr. hr.
DANC 221 Modern Dance II 1 cr. hr.
DANC 224 Ballet I 1 cr. hr.
DANC 226 Ballet II 1 cr. hr.
DANC 250 Dance Composition 2 cr. hrs.
DANC 257 Rhythms 2 cr. hrs.
DANC 260 Dance Repertory 1-3
DANC 362 Dance for the Elementary School 2 cr. hrs.
HEAL 262 Human Anatomy and Physiology 3 cr. hrs.
SCTA 333 Stage Lighting 3 cr. hrs.
The Animal and Food Science Department offers three options for dairy science majors. Required core courses within the Dairy Science major are identical, regardless of option. Additional requirements are based on the choice of option. The Dairy Science - Management option is designed for students seeking careers in dairy farm management or supporting industries such as feed, pharmaceutical, or genetics sectors of the dairy industry. The Dairy Science - Science option is designed for students that plan to enroll in graduate or professional degree programs following completion of the Bachelor of Science degree. This option is strongly suggested for students that hope to enroll in a college of veterinary medicine at a future date. The Dairy Science - Minor option is designed for students who wish to supplement their education with an academic minor or second major.

General Education Requirements as listed on pages pages 26-27 with the following exception: PHYS 151 or 161 required for Science option

Foundation Courses in Agriculture: 12 cr. hrs.
ANSC 111 Introduction to Animal Science 3 cr. hrs.
Select 3 from the following:
FDSC 112 Introduction to Food Science 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science
AGEC 230 Agricultural Economics I 3 cr. hrs.
SOIL 210 Introduction to Soils 3 cr. hrs.

Dairy Science Major: 63-65 Total Credits
Required Courses: 35 cr. hrs.
DASC 120 Orientation to Dairy Science 1 cr. hr.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 232 Applied Feeds and Feeding 3 cr. hrs.
ANSC 257 Genetics 3 cr. hrs.
ANSC 260 Animal Physiology 4 cr. hr.
DASC 306 Dairy Production 3 cr. hrs.
ANSC 345 Animal Health 2 cr. hrs.
ANSC 346 Principles of Animal Breeding 3 cr. hrs.
DASC 404 Lactation and Milk Quality 3 cr. hrs.
DASC 406 Advanced Dairy Management 3 cr. hrs.
ANSC 433 Advanced Nutrition 3 cr. hrs.
or DASC 436 Dairy Cattle Nutrition or 3 cr. hrs.
ANSC 448 Physiology of Reproduction 3 cr. hrs.
DASC 485 Seminar in Dairy Science 1 cr. hr.
Select Management, Science, or Minor Option:
Management Option 25 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
DASC 270/370 Internship I/Internship II 4 cr. hr.
Choose two from:
AGEC 305 Agricultural Business Accounting 3 cr. hrs.
AGEC 345 Agricultural Law 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 365 Agricultural Finance 3 cr. hrs.
Additional directed electives: 9 cr. hrs.
Students may select any combination of courses offered by Food Science, Agricultural Education, Agricultural Economics, Agricultural Engineering, Plant and Earth Science, or the College of Business and Economics. At least 6 credit hours must be earned from courses at the 200 level or higher.
Science Option 28-30 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 117 General Chemistry Lab II 1
CHEM 231 Organic Chemistry I 3 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
MATH 147 College Algebra and Trigonometry 3 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.
Choose one from the following:
BIOL 230 General Zoology 3 cr. hrs.
BIOL 240 Cell and Molecular Biology 3 cr. hrs.
PHYS 152 General Physics II 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
ANSC 447 Endocrinology 2 cr. hrs.
CHEM 362 Biochemistry II 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.
Minor Option 28-30 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
Additional required courses and directed electives: 22-24
Students completing the Dairy Science major with the minor option may complete any minor or second major (other than the Animal Science major or minor) offered by the University of Wisconsin-River Falls.

ANSC 111 Introduction to Animal Science 3 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 232 Applied Feeds and Feeding 3 cr. hrs.
ANSC 257 Genetics 3 cr. hrs.
ANSC 345 Animal Health 2
DASC 120 Orientation to Dairy Science 1 cr. hr.
DASC 306 Dairy Production 3 cr. hrs.
CAFES Electives 12 cr. hrs.
Dairy Science Minor: 22-24
Total Credits Required Courses: 18 cr. hrs.
ANSC 231 Principles of Nutrition 3 cr. hrs.
ANSC 232 Applied Feeds and Feeding 3 cr. hrs.
ANSC 257 Genetics 3 cr. hrs.
DASC 306 Dairy Production 3 cr. hrs.
Choose two courses from:
DASC 404 Lactation and Milk Quality 3 cr. hrs.
DASC 406 Advanced Dairy Management 3 cr. hrs.
DASC 436 Dairy Cattle Nutrition 3 cr. hrs.
Directed Electives: 4-6 cr. hrs.
Choose 1-3 courses from all courses in DASC, ANSC, AGBI, or FDSC except the following: Courses numbered lower than the 200 level; more than one evaluation or independent study course-DASC 210, 310, 490, ANSC 211, 311, 313, 490, FDSC 490.
UW-River Falls offers elementary majors an early childhood minor which meets certification requirements to teach kindergarten and pre-kindergarten. In addition to providing further enrichment in techniques for instruction in the primary grades, this minor and certification increases the range of potential employment for an elementary education major. Those who may seek employment in existing day care centers, nursery schools, child and family education programs or those intending to start their own private pre-school should investigate the opportunities opened via an early childhood minor.

**Early Childhood Certification Program**

Prerequisites to entering the minor sequence:
TED 211 Educational Psychology: Elementary Education Completion of 30 credits
Required Courses: 23 cr. hrs.
TED 225 Developmental Learning Experiences of Young Children 3 cr. hrs
Prerequisite for all other Early Childhood courses
TED 335 Kindergarten Curriculum and Materials 3 cr. hrs.
TED 340 Pre-Kindergarten Curriculum 3 cr. hrs.
TED 410 Early Childhood Language Arts 3 cr. hrs.
TED 400 Supervision and Management Early Childhood Program 2 cr. hrs.
TED 405 Special Needs Child: Early Childhood Classroom 3 cr. hrs.
TED 330 Infant Toddler Development 3 cr. hrs.
TED 345 Parent Education and Family Development 3 cr. hrs.
Student Teaching Requirement: 10 cr. hrs.
TED 471 Student Teaching: Pre-kindergarten/Kindergarten (Co /Prerequisite TED 400)
Economics (ECON)  
Department of Economics  
College of Business and Economics  

315 North Hall  
(715) 425-3335  
FAX: (715) 425-0707  
Web Site: http://www.uwrf.edu/sbe/

Brian Schultz-Chair, Jackie Brux, Janna Cowen, Hossein Eftekari, Pascal Ngoboka, Glenn Potts,  
Susan K. Rogers, Hamid Tabesh, John Walker  

General Education Requirements as listed on pages pages 44-45.  

Economics Major-Liberal Arts: 35 Total Credits  
Option A: College of Arts and Sciences  
Required Courses: 20 cr. hrs.  
ECON 201 Principles of Microeconomics 3 cr. hrs.  
ECON 202 Principles of Macroeconomics 3 cr. hrs.  
ECON 205 Quantitative Analysis 3 cr. hrs.  
ECON 301 Intermediate Microeconomics 3 cr. hrs.  
ECON 302 Intermediate Macroeconomics 3 cr. hrs.  
ECON 326 Statistical Methods for Economics and Business 3 cr. hrs.  
ECON 480 Senior Seminar (writing intensive) 2 cr. hrs.  
Elective Courses: 15 cr. hrs.  
Economics courses 300 level or above  
Required Supporting Course: 3 cr. hrs.  
ECON 226 Introduction to Statistics 3 cr. hrs.  
Option B: College of Business and Economics  
Required Courses:  
As listed for College of Arts and Sciences Option 20 cr. hrs.  
Elective Courses:  
As listed for College of Arts and Sciences Option 15 cr. hrs.  
Required Supporting Courses: 6 cr. hrs.  
ECON 226 Introduction to Statistics 3 cr. hrs.  
MNGT 265 The Computer in Business 3 cr. hrs.  

Economics Minor: 24 Total Credits  
Liberal Arts Option  
Required Courses: 15 cr. hrs.  
ECON 201 Principles of Microeconomics 3 cr. hrs.  
ECON 202 Principles of Macroeconomics 3 cr. hrs.  
ECON 205 Quantitative Analysis 3 cr. hrs.  
ECON 301 Intermediate Microeconomics 3 cr. hrs.  
ECON 302 Intermediate Macroeconomics 3 cr. hrs.  
Electives: Economics-300 level or above 9 cr. hrs.  
Education Option Required Courses: 6 cr. hrs.  
ECON 201 Principles of Microeconomics 3 cr. hrs.  
ECON 202 Principles of Macroeconomics 3 cr. hrs.  
Electives in Economics: 18 cr. hrs.  
Choose from:
ECON 289 Special Topics: Economics 1-3
ECON 305 Money and Banking 3 cr. hrs.
ECON 312 Political Economics of Discrimination 3 cr. hrs.
ECON 324 Labor Economics 3 cr. hrs.
ECON 328 Domestic Topics in Third World Economic Development 3 cr. hrs.
ECON 329 International Topics in Third World Economic Development 3 cr. hrs.
ECON 332 Public Finance 3 cr. hrs.
ECON 334 Public Regulation 3 cr. hrs.
ECON 340 Contemporary International Trade Issues 3 cr. hrs.
ECON 342 International Finance 3 cr. hrs.
ECON 344 Comparative Economic Systems 3 cr. hrs.
ECON 362 History of Economic Thought 3 cr. hrs.
ECON 489 Selected Topics: Economics 1-3
The Bachelor of Arts degree is offered in English or in Teaching English to Speakers of Other Languages (TESOL). The B.A. is a degree for the twenty-first century in its emphasis on broad learning, international studies, and the learning of languages. No minor is needed for this degree. The B.A. in English (Liberal Arts) prepares students to be broadly educated, culturally and historically, and skilled in thinking critically, researching, and writing. The degree prepares students for jobs in business, government and nonprofit organizations, journalism, and publishing. The B.A. in Teaching English to Speakers of Other Languages prepares students to teach English to non-native speakers in other countries or in private schools, businesses, or organizations here in the U.S. See page 173 for the program descriptions for TESOL.

The Bachelor of Science (Liberal Arts) degree is offered in English or in Teaching English to Speakers of Other Languages (TESOL). The B.S. is designed for those who wish to supplement their expertise in English with a second field of concentrated study: a minor. The B.S. in English (Liberal Arts) prepares students through their broad education and important general skills to enter various careers, and they choose minors that supplement their career goals. Some commonly chosen minors are history, film studies, journalism, professional writing, art, speech, and one of the modern languages. If a modern language is not chosen as a minor, a modern language course is strongly recommended as a liberal arts elective. The B.S. in Teaching English to Speakers of Other Languages (Liberal Arts) prepares students to teach English to non-native speakers in other countries or in private schools, businesses, or organizations here in the U.S. A minor in a modern language is one of the ideal complementary minors, but TESOL majors choose a variety of minors as well.

The Bachelor of Science (Education) degree is primarily intended to certify students to teach English in public high schools though the core skills it develops have broad application as well. The B.S. in English (Education) prepares students to teach literature, interpretive skills, writing, language, research, and critical thinking skills in high schools. Students must choose a minor. Minors in which students can obtain a second certification to teach in that subject are popular choices. Some of these minors include speech communication and theatre arts, a modern language, journalism, and history. The B.S. in Teaching English to Speakers of Other Languages (Education) prepares students to teach children who are non-native speakers of English in the public schools. Depending on the educational setting in which the student intends to work, such a major can work well with any of the minors that are certifiable areas of study.

The Bachelor of Science in Broad Area English (Education) degree is designed to provide prospective high school teachers with additional areas of study that support their core English courses and that respond to the current demands of the teaching situations in modern secondary schools. No minor is required with this major; the Broad Area in effect replaces the minor.
General Education Requirements-Liberal Arts
B.A. and B.S. Liberal Arts Majors
General Education Requirements as listed on pages pages 34-35 with the following exceptions:

Humanities and Fine Arts: The General Education literature requirement is fulfilled by taking one of
the following courses: ENGL 241, 242, 243, 244, or 245. English majors should not take another
of these; only one will count toward graduation.
Social and Behavioral: TESOL majors and minors should include PSYC 101 among their three social
science courses.

English Major - Liberal Arts: 36 Total Credits
Core Requirements: 12 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 335 Shakespeare 3 cr. hrs.
Required Courses: 12 cr. hrs.
ENGL 324 Survey of American Lit. I, Origins to 1900 (writing intensive) 3 cr. hrs.
ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive) 3 cr. hrs.
ENGL 331 Survey of British Lit. I, to 1800 (writing intensive) 3 cr. hrs.
ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive) 3 cr. hrs.
A second period course in British literature may replace one of the British survey courses, or a
second period course in American literature may replace one of the American survey courses. At
least three survey courses must be taken.
Directed Electives: 9 cr. hrs.
English Liberal Arts majors may double count courses in the General Education Humanities/Fine
Arts "Other" group with those same courses which are applicable to this directed elective
requirement. These double countable courses are: ENGL 203, 206, 207, 212, 214, 222, 231, 232,
233, 234, 235, 300, and 443.
Select one genre, sub-genre, or diversity literature course: 3 cr. hrs.
ENGL 202 Literature of Science Fiction 3 cr. hrs.
ENGL 203 Literature of the African-American Experience 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 207 Literature of the Asian-American Experience 3 cr. hrs.
ENGL 212 The Native American in Literature 3 cr. hrs.
ENGL 214 Women in Literature 3 cr. hrs.
ENGL 222 Literature of Fantasy 3 cr. hrs.
ENGL 226 Detective Fiction 3 cr. hrs.
ENGL 231 The Short Story 3 cr. hrs.
ENGL 232 Contemporary Drama 3 cr. hrs.
ENGL 233 Introduction to Poetry 3 cr. hrs.
ENGL 234 Modern Novels 3 cr. hrs.
ENGL 235 American Autobiography 3 cr. hrs.
ENGL 300 Women and Film 3 cr. hrs.
ENGL 343 The Novel and Film Adaptations 3 cr. hrs.
ENGL 443 American Ethnic Women Writers 3 cr. hrs.
Select one period course, English, American or International 3 cr. hrs.
ENGL 341 European Literature (19th Century) 3 cr. hrs.
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
ENGL 429 American Renaissance 3 cr. hrs.
ENGL 430 American Realism 3 cr. hrs.
ENGL 431 Modern American Fiction 3 cr. hrs.
ENGL 432 Contemporary American Literature 3 cr. hrs.
ENGL 441 Twentieth-Century International Literature 3 cr. hrs.
Select one English course at the 300-/400 level 3 cr. hrs.
General Electives: 3 cr. hrs.

English Minor - Liberal Arts: 24 cr. hrs.
Core Requirements as listed for Major above 12 cr. hrs.
Required Courses: 6 cr. hrs.
ENGL 324 Survey of American Lit. I, Origins to 1900 (writing intensive) 3 cr. hrs.
or ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive)
ENGL 331 Survey of British Lit. I, to 1800 (writing intensive) 3 cr. hrs.
or ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive) or 3 cr. hrs
One survey course must cover the period before 1800.
Directed Electives: 6 cr. hrs.
English Liberal Arts minors may "double count" courses in the General Education Humanities/Fine Arts "Other" group with those same courses which are applicable to this directed elective requirement. These double countable courses are ENGL 231, 232, 233, and 234.
Select one genre course: 3 cr. hrs.
ENGL 231 The Short Story 3 cr. hrs.
ENGL 232 Contemporary Drama 3 cr. hrs.
ENGL 233 Introduction to Poetry 3 cr. hrs.
ENGL 234 Modern Novels 3 cr. hrs.
ENGL 343 The Novel and Film Adaptations 3 cr. hrs.
ENGL 344 Major Authors 3 cr. hrs.
Select one period course, English, American or International: 3 cr. hrs.
ENGL 341 European Literature (19th Century) 3 cr. hrs.
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
ENGL 429 American Renaissance 3 cr. hrs.
ENGL 430 American Realism 3 cr. hrs.
ENGL 431 Modern American Fiction 3 cr. hrs.
ENGL 432 Contemporary American Literature 3 cr. hrs.
ENGL 441 Twentieth-Century International Literature 3 cr. hrs.

English Major- Education
General Education Requirements as listed on pages pages 47-48 with the following exceptions:
Humanities and Fine Arts: 9 cr. hrs.
ENGL 243 Types of Literature 3 cr. hrs.
SCTA 105 Introduction to Theatre and Drama. 3 cr. hrs.
Social and Behavioral Sciences: 9 cr. hrs.
In addition to POLS 114 and PSYC 101, choose one of the following courses, which also satisfies the cultural diversity requirement for certification: ENGL 203, 206, 207, 212, 214, 235, 385, or 443.
Professional Courses: 31-39 cr. hrs.
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 AV Materials 1 cr. hr.
TED 212 Educational Psychology (writing intensive) 5
TED 420 School and Society (admission to teacher education required) 3 cr. hrs.
TED 422 Content Area Literacy in Middle and Secondary School 3 cr. hrs.
TED 432 Techniques of Middle/Secondary Education: English
Secondary certification in the major discipline only; for certification in the minor as well, techniques must be taken in that discipline for an additional 3 credits, for a total of 34. The 39 credits indicate middle school certification.
TED (473) 474 Student Teaching: (Middle Level) Secondary (6-)12 cr. hrs.
PSYC 330 Exceptional Child 3 cr. hrs.
COUN 310 Counseling Skills for Teachers. Required for Middle School certification 2 cr. hrs.
TED 414 Development of the Transescent 3 cr. hrs.
TED 473 Student Teaching: Middle Level. Required for Middle School certification 6

Major Requirements: English-Education 39 cr. hrs.
Core Requirements: 12 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 335 Shakespeare 3 cr. hrs.
Required Courses: 24 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 324 Survey of American Lit. I, Origins to 1900 (writing intensive) 3 cr. hrs.
ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive) 3 cr. hrs.
ENGL 331 Survey of British Lit. I, to 1800 (writing intensive) 3 cr. hrs.
ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive) 3 cr. hrs.
ENGL 355 Literature for Adolescents 3 cr. hrs.
ENGL 361 Composition Theory 3 cr. hrs.
ENGL 441 Twentieth-Century International Literature 3 cr. hrs.
A second period course in British literature may replace one of the British survey courses, or a second period course in American literature may replace one of the American survey.
Directed Electives:
Select one period course
English or American 3 cr. hrs.
ENGL 341 European Literature (19th Century) 3 cr. hrs.
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
ENGL 429 American Renaissance 3 cr. hrs.
ENGL 430 American Realism 3 cr. hrs.
ENGL 431 Modern American Fiction 3 cr. hrs.
ENGL 432 Contemporary American Literature 3 cr. hrs.

English Education Minor: 27 Total Credits
Core Requirements: 12 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 335 Shakespeare 3 cr. hrs.
Required Courses: 6 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 361 Composition Theory 3 cr. hrs.
Directed Electives: One survey course must cover the period before 1800. 6 cr. hrs.
A. Select one survey course. 3 cr. hrs. ENGL 324 Survey of American Lit. I, Origins to 1900
(writing intensive) 3 cr. hrs. 
or ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive) or 3 cr. hrs.
B. Select one survey or period course. 3 cr. hrs. ENGL 331 Survey of British Lit. I, to 1800 (writing intensive) 3 cr. hrs.
or ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive)
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
Supporting Course: 3 cr. hrs.
ENGL 355 Literature for Adolescents 3 cr. hrs.

Broad Area English Education Major: 63 Total Credits
The Broad Area English Education Major consists of four groups of courses:
1. Core Requirements and Required Courses: 36 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive) 3 cr. hrs.
ENGL 335 Shakespeare 3 cr. hrs.
ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive) 3 cr. hrs.
ENGL 355 Literature for Adolescents 3 cr. hrs.
ENGL 361 Composition Theory 3 cr. hrs.
ENGL 441 Twentieth-Century International Literature 3 cr. hrs.
Students may choose between:
ENGL 324 Survey of American Lit. I, Origins to 1900 (writing intensive) 3 cr. hrs.
or ENGL 331 Survey of British Lit I, to 1800 (writing intensive) 3 cr. hrs.
Students who take ENGL 324 must choose one of the following period courses:
ENGL 426 Victorian Literature 3 cr. hrs.
ENGL 427 Modern British Literature: 1890-1940 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
Students who take ENGL 331 must choose one of the following period courses:
ENGL 429 American Renaissance 3 cr. hrs.
ENGL 430 American Realism 3 cr. hrs.
ENGL 431 Modern American Fiction 3 cr. hrs.
ENGL 432 Contemporary American Literature 3 cr. hrs.
2. Areas of skills that correlate highly with current needs: 12 cr. hrs.
One reading pedagogy course: 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.
Select one of the following journalism courses: 3 cr. hrs.
JOUR 112 Writing for the Mass Media 3 cr. hrs.
JOUR 120 Radio and Television Field Production 3 cr. hrs.
JOUR 269 Feature Writing for Magazines and Newspapers 3 cr. hrs.
JOUR 360 Opinion Writing 3 cr. hrs.
Select one of the following speech or theater arts courses: 3 cr. hrs.
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 211 Public Speaking 3 cr. hrs.
SCTA 221 Acting II: Characterization 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
SCTA 335 Directing I 3 cr. hrs.
Select one of the following film studies courses: 3 cr. hrs.
SCTA 200 Introduction to Film Studies 3 cr. hrs.
SCTA 248 Film Cultures in Conflict 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 300 Women and Film 3 cr. hrs.
ENGL 301 History of Film 3 cr. hrs.
ENGL 343 The Novel and Film Adaptations 3 cr. hrs.
ENGL 448 Teaching of Film in the Secondary School 3 cr. hrs.
HIST 389 Topics in History (Film) 3 cr. hrs.
3. Selected areas of content necessary for a broadened perspective: 12 cr. hrs.
Choose two courses from either cultural area of special focus 6 cr. hrs.
World Culture, Select two to total 6 cr. hrs.:
ART 211 Western Art to 1500 3 cr. hrs.
ART 212 Art History from 1500 3 cr. hrs.
ART 314 Art of China, India and Japan 2 cr. hrs.
ART 318 Latin American Art 2 cr. hrs.
HIST 321 The Middle Ages 3 cr. hrs.
HIST 322 The Renaissance 3 cr. hrs.
HIST 323 The Reformation 3 cr. hrs.
HIST 324 Absolutism, Enlightenment, and Revolution 3 cr. hrs.
HIST 327 World War I to World War II 3 cr. hrs.
HIST 328 World War II and the Cold War 3 cr. hrs.
HIST 330 Revolutions in Modern History 3 cr. hrs.
MUS 300 World Music 3 cr. hrs.
PHIL 221 Ancient Philosophy 3 cr. hrs.
PHIL 222 Hellenistic and Medieval Philosophy 3 cr. hrs.
PHIL 223 Origins of Modern Phil. From Bacon to Kant 3 cr. hrs.
PHIL 224 Existentialism and Late Modern Philosophy 3 cr. hrs.
PHIL 230 Logical Reasoning 3 cr. hrs.
PHIL 235 Philosophy of the Arts 3 cr. hrs.
HUM 255 Arts and Ideas I 4 cr. hr.
HUM 498 Senior Level Interdisciplinary Capstone Course in Humanities 2 or American Culture, Select two:
ART 311 American Art to 1865 3 cr. hrs.
ART 312 American Art since 1865 3 cr. hrs.
HIST 103 U. S. History to 1877 3 cr. hrs.
HIST 104 U. S. History Since 1865 3 cr. hrs.
HIST 205 Women's History: United States 3 cr. hrs.
HIST 206 Native Americans and the United States 3 cr. hrs.
HIST 207 African American History 3 cr. hrs.
HIST 369 American Intellectual History 3 cr. hrs.
MUS 200 American Music 3 cr. hrs.
SOCI 228 Native American Cultures 3 cr. hrs.
SCTA 230 Playwrights of Color 3 cr. hrs.
SCTA 339 American Theatre 3 cr. hrs.
and Select one of the following mass media or journalism courses: 3 cr. hrs.
Majors are encouraged to take JOUR 455 or PHIL 316.
JOUR 101 Introduction to Mass Communications 3 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
SCTA 353 Mass Media and Popular Culture 3 cr. hrs.
PHIL 316 Media Ethics 3 cr. hrs.

and Select one of the following speech or theater courses: 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.
SCTA 316 Organizational Communication 3 cr. hrs.
SCTA 319 Freedom to Speak 3 cr. hrs.
SCTA 407 Listening Instruction 3 cr. hrs.
SCTA 414 Speech in History 3 cr. hrs.

4. Choose a directed elective from one of the following: 3 cr. hrs.
Dramatic Literature, Choose from the following: 3 cr. hrs.
ENGL 232 Contemporary Drama 3 cr. hrs.
SCTA 337 History of Theatre and Dramatic Literature: Ancient Traditions through Renaissance Drama 3 cr. hrs.
SCTA 338 History of Theatre and Dramatic Literature: 18th Century to the Present 3 cr. hrs.
SCTA 339 American Theatre 3 cr. hrs.
or Film Studies 3 cr. hrs.
FILM 200-499;
ENGL 300, 343, 448;
JOUR 245, 302;
GERM 315;
SCTA 160, 248, 260, 448, and topics courses related to film.
or Writing Course 3 cr. hrs.
ENGL 262, 266, 367, 369, 370, 372, 373;
JOUR 112, 113, 115, 230, 241, 245, 251, 252, 269, 360
or any Journalism Course 3 cr. hrs.
JOUR 101-499

or Humanities Course Choose from the following: 3 cr. hrs.
HUM 255 Arts and Ideas 1 4 cr. hr.
HUM 256 Arts and Ideas II 4 cr. hr.
The environmental science major is designed to prepare students to face complex environmental challenges in the context of environmental quality management and sustainable development. Environmental science majors are prepared to monitor, model and manage environmental systems in the areas of environmental quality and risk evaluation, sampling and analysis, remediation and regulatory compliance. Graduates pursue careers in environmental consulting firms, regulatory agencies or corporations. Students with research interests are also prepared to pursue advanced degrees. The major is interdisciplinary within the College of Agriculture, Food and Environmental Sciences and the College of Arts and Sciences, and is administered by the Department of Plant and Earth Science. Departments contributing to the major include Agricultural Engineering Technology, Biology, Chemistry, Geography, Physics, and Plant and Earth Science. Required foundation courses are in the College of Agriculture, Food and Environmental Sciences OR the College of Arts and Sciences.

Foundation Courses in Agriculture 9-10 cr. hrs.
Select 3:
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGEN 150 Agricultural And Environmental Engineering Technology 3 cr. hrs.
AGEC 230 Agricultural Economics I 3 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science or 3 cr. hrs.

College of Arts and Sciences Requirements:
SOCI 245 Environmental Sociology 3 cr. hrs.
PHIL 303 Environmental Ethics 3 cr. hrs.
ESM 307 Multicultural Perspectives on the Environment 3 cr. hrs.

Environmental Science Major
Environmental Science Core 18 cr. hrs.
GEOL102 Introductory Geology Lab 1 cr. hr.
ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
ESM 485 Seminar in Resource Management 1 cr. hr.
Choose one of the following:
ESM 303 Environmental Policies and Administration 3 cr. hrs.
BIOL 355 Environmental Law 3 cr. hrs.
POLS 355 Environmental Law 3 cr. hrs.
Choose one of the following:
MATH 226 Fundamentals of Statistics 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
ANSC 341 Biometrics 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers 3 cr. hrs.

Required Supporting Courses: 29-30 cr. hrs.
MATH 166 Calculus 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
Choose one of the following two chemistry lecture/lab combinations:
CHEM 231 Organic Chemistry I 3 cr. hrs.
and CHEM 236 Organic Chemistry Lab I 1 cr. hr.
or CHEM 251 Analytical Chemistry 2 cr. hrs.
and CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
Choose one of the following two physics series A. or B.:
A. PHYS 151 General Physics I 4 cr. hr.
PHYS 156 General Physics Lab I 1 cr. hr.
PHYS 152 General Physics II 4 cr. hr.
PHYS 157 General Physics Lab II 1 cr. hr.
B. PHYS 161 General Physics I 4 cr. hr.
PHYS 101 General Physics Lab I 1 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 102 General Physics Lab II 1 cr. hr.
BIOL 360 Ecology 3 cr. hrs.
Choose one of the following two courses:
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
Choose one of the following two courses:
BIOL 240 Cell and Molecular Biology
BIOL 324 Microbiology 3 cr. hrs.
Directed Electives: 18 cr. hrs.
A minimum of 6 credits in 400 level or greater. Courses taken as part of the supporting requirement cannot be double counted as directed electives.
SOIL 311, 325, 350, 440, 460 3-4 cr. hr.
BIOL 210, 230, 240, 310, 324, 330, 344, 354, 360, 412, 413, 434, 444 3-4 cr. hrs.
GEOG 212, 250, 255, 316, 360, 368, 379, 412, 450, 460 3-12 cr. hrs.
CHEM 231 and 236, 232 and 237, 251 and 256, 356 1-3 cr. hrs.
AGEN 325, 365, 425, GENG 450 3-4 cr. hr.
GEOL 269, 327, 330, 445 2-4 cr. hr.
ESM 270, 333, 363, 370, 377, 413, 417 2-4 cr. hr.
AGEC450 3 cr. hrs.
Environmental Science Minor: 22 Total Credits
Required Courses: (ESM 105 is a prerequisite) 10 cr. hrs.
ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. hrs.
EMS 303 Environmental Policies and Administration 3 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
and GEOG 111 Laboratory for Physical Environments: Patterns and Systems 1 cr. hr.
or GEOL 101 Introductory Geology 3 cr. hrs.
and GEOL 102 Introductory Geology Lab 1 cr. hr.
Directed Electives: (6 credits at the 300 level or above) 12 cr. hrs.
ESM 109, 151, 307, 377, 490 3 cr. hrs.
ESM 300 or GEOG 300 3 cr. hrs.
GEOL 202, 269, 490 1-3 GEOL 330 or GEOG 300 2-3 GEOG 490, 499 1-3 BIOL/POLS 355 3 cr. hrs.
PHIL 303 3 cr. hrs.
CHEM 200 3 cr. hrs.
SOCI 245 3 cr. hrs.
The Ethnic Studies minor is designed to allow students to study and focus their attention on the ethnic experiences in America. The courses included in the minor have been selected to focus the student’s study as well as to allow for individual flexibility. It is possible for Arts and Sciences majors to double minor in Ethnic Studies and Women's Studies with minimal additional credits. The double minor is flexible enough for students to graduate on time while supporting virtually any major. By choosing the Women's Studies/Ethnic Studies double minor, students also fulfill six hours of the Arts and Sciences Liberal Arts requirements as well as the three-hour cultural diversity requirement. See the program listing for Ethnic Studies.

Ethnic Studies Minor: 24 Total Credits
Required Courses: 6 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
ETHN 480 Seminar: Ethnicity and Gender 3 cr. hrs.
Directed Electives: Electives in American Ethnicity 6 cr. hrs.
ECON 312 Political Economy of Discrimination 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 235 American Autobiography 3 cr. hrs.
ENGL 443 American Ethnic Women Writers 3 cr. hrs.
HIST 204 U.S. Immigration and Ethnic History 3 cr. hrs.
PHIL 245 Islamic and Oriental Religions in the U.S. 3 cr. hrs.
POLS 212 The Politics of Equality and Inequality in the United States 3 cr. hrs.
PSYC 285 Psychology of Prejudice and Racism 3 cr. hrs.
SCTA 230 Playwrites of Color 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SOCI 225 Sociology of Race and Ethnicity 3 cr. hrs.
TED 252 Foundations of Multicultural Education 3 cr. hrs.
Directed Electives: Electives in Specific Ethnic Groups 9 cr. hrs.
ANTH 228 Native American Cultures 3 cr. hrs.
ENGL 203 Literature of the African American Experience 3 cr. hrs.
ENGL 207 Literature of the Asian American Experience 3 cr. hrs.
ENGL 212 The Native American in Literature 3 cr. hrs.
ETHN 270 Puerto Rican Society 3 cr. hrs.
HIST 206 Native Americans and the United States 3 cr. hrs.
HIST 207 African-American History 3 cr. hrs.
MUS 255 History of Jazz 3 cr. hrs.
Directed Electives: Supporting Courses 3 cr. hrs.
Courses Relating to an Ethnic Heritage
ART 318 Latin American Art 2 cr. hrs.
GEOG 342 Latin America 3 cr. hrs.
GEOG 343 Africa 3 cr. hrs.
HIST 201 Introduction to Asian Civilization 3 cr. hrs.
HIST 202 Introduction to Latin American Civilizations 3 cr. hrs.
POLS 348 Politics of East Asia 3 cr. hrs.
Courses Relevant to the American Ethnic Experience
GEOG 237 Poverty in the United States 3 cr. hrs.
WMST 200 Introduction to Women's Studies 3 cr. hrs.
ESM 307 Multicultural Perspectives on the Environment 3 cr. hrs.

Double Minor: Ethnic Studies & Women's Studies See the program listing on page 176.
Farm Management
Department of Agricultural Economics (AGEC)
College of Agriculture, Food and Environmental Sciences

103 Agriculture Science Hall
(715) 425-3298
Web Site: www.uwrf.edu/ag-economics/

Nate Splett-Chair, Lewis May, Stanley Schraufnagel, James Shatava, Larry Swain, David Trechter.

Farm Management Minor: 24 Total Credits

Required courses:
AGEC 230 Agricultural Economics I 3 cr. hrs.
AGEC 240 Cooperatives 3 cr. hrs.
AGEC 305 Agricultural Business Accounting 3 cr. hrs.
AGEC 355 Agricultural Markets and Prices (writing intensive) 3 cr. hrs.
AGEC 360 Farm Management 3 cr. hrs.
AGEC 365 Agricultural Finance 3 cr. hrs.
AGEC 456 Commodity Marketing 3 cr. hrs.
AGEC 440 Agricultural Policy I (writing intensive) 3 cr. hrs.
Food Science and Technology (FDSC) 
Department of Animal and Food Science 
College of Agriculture, Food and Environmental Sciences 

247 Agriculture Science Hall 
(715) 425-3704 
Web Site http://www.uwrf.edu/animal-science/welcome.html 

Anthony Jilek-Chair, Larry Baumann, Perry Clark, Dennis Cooper, Philip George, Thomas Goerke, 
Lawrence Kasten, Steven Kelm, Ranee May, Peter Rayne, Stephen Ridley, Purnendu C. Vasavada, 
Bonnie Walters, Steve Watters 

General Education Requirements as listed on pages pages 26-27 with the following exceptions: 

Sciences Required Courses: 
CHEM 111 CHEM 116 BIOL 150 PHYS 151 or 161 
Mathematics Required Courses: MATH 147 or 166 

Foundation Courses in Agriculture: 12 cr. hrs. 
FDSC 112 Intro to Food Science 3 cr. hrs. 
ANSC 231 Principles of Nutrition 3 cr. hrs. 
AGEN 352 Food Engineering 3 cr. hrs. 
AGEC230 Agriculture Economics I 3 cr. hrs. 

Food Science and Technology Major: 43-47 Total Credits 
Required Courses: 29 cr. hrs. 
FDSC 113 Intro Food Science Lab 1 cr. hr. 
FDSC 140 Meat and Meat Products 
or FDSC 202 Dairy Manufacturing I-required for Dairy Tech Option 
or FDSC 259 Cereal Technology 3 cr. hrs. 
FDSC 285 Seminar in Food Science 1 cr. hr. 
FDSC 312 Food Processing 4 cr. hr. 
FDSC 313 Food Processing Lab 1 cr. hr. 
FDSC 320 Food Quality Assurance 2 cr. hrs. 
FDSC 335 Food Microbiology 4 cr. hr. 
FDSC 360 Food Chemistry 3 cr. hrs. 
FDSC 385 Seminar in Food Science 1 cr. hr. 
FDSC 422 Product Development and Sensory Evaluation 4 cr. hr. 
FDSC 461 Food Analysis 4 cr. hr. 
FDSC 485 Seminar in Food Science 1 cr. hr. 
Required Supporting Courses: 19 cr. hrs. 
CHEM 112 General Chemistry II 4 cr. hr. 
CHEM 117 General Chemistry Lab 1 cr. hr. 
CHEM 230 General Organic Chemistry 
or CHEM 231 Organic Chemistry I 3 cr. hrs. 
AGBI 251 Agricultural Biochemistry 
or CHEM 361 Biochemistry 3 cr. hrs. 
AGBI 252 Agricultural Biochemistry Laboratory Techniques 1 cr. hr. 
BIOL 324 Bacteriology 4 cr. hr. 
ANSC 341 Biometrics 3 cr. hrs. 
FDSC 270 Internship 2-4 cr. hr. 
Select Industry, Dairy Technology, or Science Option below:
Industry Option 14-16 cr. hrs
ACCT231 Principles in Accounting I 3 cr. hrs.
Select two from: FINC 345 Managerial Finance or
AGEC 365 Agricultural Finance 3 cr. hrs.
MNGT 300 Principles of Management or
AGEC 468 Agribusiness Firm Management 3 cr. hrs.
MKTG 310 Principles of Marketing or
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
Electives (choose any Food Science courses) 5-7 cr. hrs.

Dairy Technology Option 14-18 cr. hrs.
FDSC 302 Dairy Manufacturing II 3 cr. hrs.
FDSC 469 Dairy Plant Management 2 cr. hrs.
FDSC 470 Dairy Plant Management Lab 1 cr. hr.
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
AGEC 468 Agribusiness Firm Management 3 cr. hrs.
Electives (choose any Food Science courses) 2-4 cr. hrs.

Science Option - IFT Approved Curriculum 14-16 cr. hrs.
CHEM 232 Organic Chemistry II 3 cr. hrs.
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 237 Organic Chemistry Lab II 1 cr. hr.
MATH 167 Calculus II 4 Electives (choose any Food Science Courses) 5-7 cr. hrs.

Food Science Minor: 23 Total Credits
Required Courses: 17 cr. hrs.
FDSC 112 Intro to Food Science 3 cr. hrs.
FDSC 113 Intro Food Science Lab 1 cr. hr.
FDSC 312 Food Processing 4 cr. hr.
FDSC 313 Food Processing Lab 1 cr. hr.
FDSC 335 Food Microbiology 4 cr. hr.
BIOL 324 Bacteriology 4 cr. hr.
Select from: 6 cr. hrs.
FDSC 140 Meat and Meat Products 3 cr. hrs.
FDSC 202 Dairy Manufacturing I 3 cr. hrs.
FDSC 240 Meat Product Processing 3 cr. hrs.
FDSC 259 Cereal Technology 3 cr. hrs.
FDSC 302 Dairy Manufacturing II 3 cr. hrs.
Film Studies (FILM) Interdisciplinary

257 Kleinpell Fine Arts
(715) 425-3354
Web Site http://www.uwrf.edu/film-studies-minor/

Carole Gerster-Coordinator

Film Studies is an interdisciplinary minor offered by four departments: English, History, Journalism, and Speech Communication and Theatre Arts. Film Studies examines film as an art form, as an industry, and as the most popular and most influential communication medium of the twentieth century. Film Studies provides an interdisciplinary approach to visual literacy as it introduces students to film history, theory, criticism, and production.

Film Studies Minor: 23-24 Total Credits
Required Courses: 8-9 cr. hrs.
FILM 200 Introduction to Film Studies 3 cr. hrs.
or SCTA 200 Introduction to Film Studies
Choose one course from the following:
FILM/ENGL/HIST/JOUR/SCTA 301 History of Film 3 cr. hrs.
FILM 499 Directed Project in Film 2-3 cr. hrs.
Criticism Electives: 6-9 cr. hrs.
FILM 206 Ethnic Film and Literature 3 cr. hrs.
FILM 248 Cultures in Conflict 3 cr. hrs.
FILM 300 Women and Film 3 cr. hrs.
FILM 302 History of Documentary 3 cr. hrs.
FILM 343 The Novel and Film Adaptations 3 cr. hrs.
Directed Electives: 6-9 cr. hrs.
FILM 160 TV Studio Production 3 cr. hrs.
FILM 232 Makeup for Theatre, Film, and Video 3 cr. hrs.
FILM 245 Writing for Film and Television 3 cr. hrs.
FILM 260 Electronic Field Production 3 cr. hrs.
FILM 261 Electronic Media Copy Writing 3 cr. hrs.
FILM 289 Special Topics: Film (Co-listed with ENGL and MODL, which offer individual courses)
FILM 315 German Classic and Modern Film 3 cr. hrs.
FILM 360 Corporate Electronic Communication 3 cr. hrs.
FILM 389 Special Topics (Co-listed with HIST, JOUR, MUS, SCTA, SOCI, which offer individual courses)
FILM 448 Teaching Film in the Secondary School 3 cr. hrs.
THE GENERAL EDUCATION PROGRAM

All undergraduate students must complete General Education Program requirements comprising slightly fewer than one-third of the total credits needed to earn a degree. The General Education Program is designed to develop essential academic skills, to acquaint students with their cultural heritage, and to provide them with a broad base of liberal studies in the humanities, mathematics, and in the social and physical sciences. This program will serve as a foundation for study in a major. Further, it will develop breadth of knowledge and will cultivate the critical judgment necessary for mature and responsible lives in work, in leisure and as citizens of the nation and the world.

I. Skills to be developed include:

1. to read, write, speak and listen effectively.
2. to understand mathematical reasoning, to interpret numerical data and to perform mathematical operations.
3. to think critically, to analyze problems systematically and to integrate knowledge from the humanities and the social and physical sciences.

II. Breadth of knowledge to be developed includes:

1. to understand historical perspectives.
2. to understand important literature of past and contemporary cultures.
3. to understand the ways in which artistic forms and styles represent and interpret the human experience.
4. to understand the principles and the methods of the basic physical and life sciences, including laboratory work.
5. to understand the concepts and methods of inquiry in the social sciences.
6. to understand the importance of one's physical and psychological well-being.

III. Elements of critical judgment to be developed include:

1. to understand the impact of technology upon contemporary culture.
2. to gain a global perspective of human culture, recognizing that this century requires such perspective.
3. to develop a sense of ethical and social responsibility.
Geography is a wide-ranging discipline which asks two questions: "Where are things located?", but even more important, "Why are they located where they are?" While the answer to the former is largely descriptive, the answer to the latter is based on analysis of data. The modern geographer uses data from many sources to assess the constantly changing physical and human landscapes of the earth's surface from local to global scales. Mapping and analyzing these physical and cultural patterns with the aid of Geographic Information Systems (GIS) involve geographers in many types of decision making. The geography major allows students to relate their studies in the humanities and social sciences to their work in the natural sciences. The geography curriculum can be tailored to those who have broad interdisciplinary interests and to those who have a focused interest in one of the geography subfields: human geography, physical geography or Geographic Information Systems (GIS) and cartography. In addition to the geography major and minor, the department offers a GIS/Cartography minor. Coursework prepares students for careers in GIS applications and digital map production. The department offers various courses in cartographic theory, GIS, and map design. All GIS and cartography courses are computer based.

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Geography Major - Liberal Arts: 36 Total Credits
(without a Cartography Minor)
Required Courses: 18 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GEOG 401 Senior Colloquium in Geography 2 cr. hrs.
Directed Electives 6 cr. hrs.
Choose 3 credits from the following:
GEOG 241 Wisconsin 3 cr. hrs.
GEOG 242 Canada 3 cr. hrs.
GEOG 340 Europe 3 cr. hrs.
GEOG 342 Latin America 3 cr. hrs.
GEOG 343 Africa 3 cr. hrs.
GEOG 344 Asia and Oceania 3 cr. hrs.
Choose 3 credits from the following:
GEOG 212 Weather and Climate 3 cr. hrs.
GEOG 213 Landforms of North America 3 cr. hrs.
GEOG 214 World Patterns of Plants and Animals 3 cr. hrs.
GEOG 220 Economic Geography 3 cr. hrs.
GEOG 225 Geography of Wine 1 cr. hr.
GEOG 235 The American Landscape 3 cr. hrs.
GEOG 237 Poverty in the United States 3 cr. hrs.
GEOG 255 Cartography II 3 cr. hrs.
GEOG 316 The Physical Environment of Urban Areas 3 cr. hrs.
GEOG 322 Urban Geography 3 cr. hrs.
GEOG 324 Historical Geography of the United States 3 cr. hrs.
GEOG 335 The American Environment: Perceptions and Policies 3 cr. hrs.
GEOG 360 Introduction to Geographic Information Systems 3 cr. hrs.
GEOG 368 Geoprocessing Techniques 3 cr. hrs.
GEOG 378 Semester Abroad 3-6 cr. hrs.
GEOG 379 Geography Internship 3-12 cr. hrs.
GEOG 385 Interdisciplinary Seminar on the American Frontier 3 cr. hrs.
GEOG 389 Topics in Geography .5-3 cr. hrs.
GEOG 412 Advanced Climatology 3 cr. hrs.
GEOG 450 Advanced Map Design and Production 3 cr. hrs.
GEOG 460 Advanced Geographic Information Systems 3 cr. hrs.
GEOG 490 Readings in Geography 1-3 cr. hrs.
GEOG 499 Independent Study 1-2 cr. hrs.
Electives: 12 cr. hrs.
Must be numbered 200 and above, see courses listed in Directed Electives.

Geography Major - Liberal Arts with Cartography Minor
Major Requirements 36 Total
Credits Required Courses: 15 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GEOG 401 Senior Colloquium in Geography 2 cr. hrs.
Directed Electives: (See Geography Major without a Cartography Minor) 6 cr. hrs.
Electives: (See Geography Major without a Cartography Minor) 15 cr. hrs.

Geography Minor - Liberal Arts: 22 Total Credits
Required Courses: 13 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
Electives: 9 cr. hrs.
(Courses numbered 200 and above)

Geography Minor - Elementary and Secondary Education: 22 Total Credits
Required Courses: 16 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 241 Wisconsin 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
General Electives: 6 cr. hrs.
(Courses numbered 200 and above)

GIS/Cartography Minor: 21 Total Credits
(with a Geography Major)
Required Courses: 12 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 255 Cartography II 3 cr. hrs.
GEOG 360 Introduction to GIS 3 cr. hrs.
GEOG 368 Geoprocessing Techniques 3 cr. hrs.
Directed Electives: 9 cr. hrs.
GROUP A: Choose 6 or 9 credits from the following:
GEOG 450 Advanced Map Design and Production 3 cr. hrs.
GEOG 460 Advanced GIS 3 cr. hrs.
GEOG 379 Geography Internship 3-12 cr. hrs.
GROUP B: If 6 credits were chosen from Group A, then choose 3 credits from the following:
GENG 235 Surveying 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 363 GIS Applications in Resource Management 3 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.

Cartography Minor 21 Total Credits
(without a Geography Major)
Required Courses: 12 cr. hrs.
(See Cartography Minor with a Geography Major)
Directed Electives: 9 cr. hrs.
GROUP A: (See Cartography Minor with a Geography Major Group A)
GROUP B: If 6 credits were chosen from Group A, then choose 3 credits from the following:
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GENG 235 Surveying 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 363 GIS Applications in Resource Management 3 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.

Geography-Broad Field Social Studies

The Broad Field Social Studies (BFSS) degree is the preferred degree for secondary teaching in the area of social studies. This degree offers many options and great versatility. The program requires that the student have a concentration (a major) in one of the social sciences and then additional work in the other social sciences. The concentration gives the degree maximum flexibility if the student does not continue in the field of education.

General Education Requirements as listed on pages pages 34-35 with the following exceptions:
Social and Behavioral Science:
POLS 114 American, National, State and Local Government
PSYC 101 General Psychology
Professional Secondary Education Requirements. See page 161. 37 Total Credits

Geography Emphasis: 66 Total Credits
Required Courses: 18 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs
GEOG 240 United States 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GEOG 401 Senior Colloquium in Geography 2 cr. hrs.
Directed Electives:
(See Geography Major without a Cartography Minor) 6 cr. hrs.
Electives:
(See Geography Major without a Cartography Minor) 12 cr. hrs.
Distribution: 30 cr. hrs.
Select 30 credits from at least two of the following: Anthropology, Economics, History, Political Science, Psychology, Sociology 9 credits from each of two of the above areas 18 3 credits from each of four of the above areas 12 cr. hrs.

Broad Field Social Science Minor
For the Social Science minor requirements refer to page 162.
Geology (GEOL)
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html


General Education Requirements as listed on pages pages 26-27 with the following exceptions:
Sciences: BIOL 100, GEOL 101, and CHEM 111,116

Geology Major
Required Geology Courses: 37-38 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 150 Historical Geology 4 cr. hr.
GEOL 230 Mineralogy 4 cr. hr.
GEOL 231 Petrology 4 cr. hr.
GEOL 285 Sophomore Seminar in Geology (writing intensive) 1 cr. hr.
GEOL 326 Structural Geology 4 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hr.
GEOL 362 Stratigraphy and Sedimentation 4 cr. hr.
GEOL 371-376 Any one of the Field Geology Courses 1-2 cr. hrs.
GEOL 441 Geophysics 4 cr. hr.
GEOL 450 Paleontology (writing intensive) 5
GEOL 485 Senior Research Experience (writing intensive) 1 cr. hr.
Required Professional Courses: 19 cr. hrs.
CHEM 112 General Chemistry II 4 cr. hr.
and CHEM 117 General Chemistry Lab II 1 cr. hr.
MATH 166 Calculus I 4 cr. hr.
Choose either sequence A or B below:
A. PHYS 151 General Physics I 4 cr. hr.
PHYS 152 General Physics II 4 cr. hr.
PHYS 156 General Physics Laboratory I 1 cr. hr.
PHYS 157 General Physics Laboratory II 1 cr. hr.
B. PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
Directed Electives:
(consult with your advisor for these or other selections) 20 cr. hrs.
AGRN 451 Integrated Pest Management 3 cr. hrs.
AGRN 462 Agricultural Ecology 2 cr. hrs.
BIOL Any 210 level or higher
CHEM Any 230 level or higher
CPTS Any computer systems course  
ENGL 367 Technical Writing 3 cr. hrs.  
ESM Any ESM course 150 or higher, except 300, and 343  
GENG Any general engineering course  
GEOG 250 Cartography I 3 cr. hrs.  
GEOG 255 Cartography II 3 cr. hrs.  
GEOG 360 Introduction to Geographic Information Systems 3 cr. hrs.  
GEOG 365 Quantitative Techniques for Geographers 3 cr. hrs.  
GEOG 368 Geoprocessing Techniques 3 cr. hrs.  
GEOG 412 Advanced Climatology 3 cr. hrs.  
GEOG 450 Advanced Map Design and Production 3 cr. hrs.  
GEOG 460 Advanced Geographic Information Systems 3 cr. hrs.  
GEOL 270 Internship I 2-4 cr. hr.  
GEOL 370 Internship II 2-4 cr. hr.  
GEOL 445 Hydrogeology 3 cr. hrs.  
GEOL 490 Independent Study in Geology 1-3  
MATH Any math class 167 or higher  
PHYS Any physics class 204 or higher  
SOIL 210 Introductory Soil Science 3 cr. hrs.  
SOIL 325 Hydric Soils and Wetland Environments 3 cr. hrs.  
SOIL 350 Pedology 4 cr. hr.  
SOIL 440 Soil and Water Conservation 4 cr. hr.  
SOIL 460 Soil Physics 3 cr. hrs.  

Emphases  
An emphasis is not a minor but is a suggested series of courses taken as directed electives that fit together well, fit well with the geology major and that would help a career in the designated area. Consult with geology faculty for more information.  
Environmental/Engineering: GENG 235, 236, 265, SOIL 460, MATH 167  
Environmental/Hydrogeology: See Hydrogeology Minor  
Graduate School: MATH 167, ENGL 367, CPTS 105, Field Geology, GEOL 490  
Mineral Exploration: ESM 333, GEOG 250, 360, CHEM 251, 256, Field Geology, GEOL 490  
Ocean Sciences: CPTS 105, BIOL 230, 434, MATH 167, CHEM 251, 256, PHYS 311, GEOL 202 cr. hrs.  
Paleontology: MATH 167, CPTS 105, Field Geology, BIOL 230, GEOL 490, Additional courses in Biology  
Petroleum Geology: GEOL 445, Field Geol., BIOL 324, 355, CHEM 231, 232, GENG 236, 368, GEOL 490  
This sequence of courses will provide Teacher Certification in Earth Science in grades 6-12. The following courses are required. MATH 146 should be taken. Consult with Geology faculty for changes.  
Earth Science Certification Option - Secondary Education General Education for Secondary Education Majors (see page 195)  
Professional Courses 36-39 cr. hrs.  
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.  
TED 156 Instructional Materials and Equipment 1 cr. hr.  
TED 212 Educational Psychology: Middle and Secondary Education 5  
TED 414 Development of the Transescent (writing intensive) 3 cr. hrs.  
TED 420 School and Society 3 cr. hrs.  
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
TED 423 Writing, Speaking and Listening in the Content Area 3 cr. hrs.
TED 434 Techniques of Middle/Secondary Education: Science 3 cr. hrs.
TED 473 Student Teaching: Middle Level 1-6
TED 474 Student Teaching: Secondary 1-12 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.
COUN 310 Counseling Skills for Teachers 2 cr. hrs.
or COUN 410 Introduction to Counseling or 3 cr. hrs.

Earth Science Courses 42 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 150 Historical Geology 4 cr. hr.
GEOL 202 Oceanography 2 cr. hrs.
GEOL 230 Mineralogy 4 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hr.
GEOL 305 Geology of the Planets 2 cr. hrs.
GEOL 330 Meteorology 2 cr. hrs.
GEOL 450 Paleontology (writing intensive) 4 cr. hr.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
PHYS 117 Introductory Astronomy 3 cr. hrs.
PHYS 151 General Physics I 4 cr. hr.
PHYS 156 General Physics Laboratory I 1 cr. hr.
BIOL 100 Introduction to Biology 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.

Geology Minor: 21 Total Credits
Required Courses 13 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 150 Historical Geology 4 cr. hr.
GEOL 230 Mineralogy 4 cr. hr.
GEOL 231 Petrology 4 cr. hr.
Electives in Geology 8 cr. hrs.
Select from 300 or 400 level Geology courses except GEOL 330
The mission of the Department of Health and Human Performance is to provide leadership and education for a diverse student body in the areas of health, physical education, recreation, dance, and athletics. The Department is committed to promoting physical activity and healthy lifestyles throughout the lifespan, whether it be through providing opportunities for exceptional performance in athletics; for a holistic teaching approach in our physical education, health, dance, outdoor education and coaching curriculae; for creative expression in Dance Theatre; or for recreational and leisure opportunities through activity courses and the Life Fitness Program. The Health and Human Performance Major provides students with three options: Option I: Comprehensive K-12 Physical Education (teacher certification; no minor required) Option II: Health and Human Performance Studies (non-certifiable option; minor required) Option III: Health Education (teacher certification; minor required) Students from all disciplines are encouraged to enjoy the opportunities provided through minors in Health Education, Coaching, Dance Education, or Outdoor Education.

General Education Requirements as listed on pages pages 47-48.

Health and Human Performance Major
Option I: Comprehensive K-12 Physical Education (teacher certifiable) 54 Total Credits
Required Courses: 22 cr. hrs.
HEAL 263 Human Anatomy 3 cr. hrs.
HEAL 366 Exercise Physiology 4 cr. hr.
P ED 161 Intro. to Health and Human Performance 2 cr. hrs.
P ED 354 Biomechanics 3 cr. hrs.
P ED 360 Tests and Measurements in Physical Education 2 cr. hrs.
P ED 450 Organization and Administration of Physical Education 2 cr. hrs.
P ED 452 History and Philosophy of Physical Education and Sport 3 cr. hrs.
SFED 200 First Aid and Basic Life Support 3 cr. hrs.
K-12 Focus Courses: 29 credits
P ED 201 Outdoor Educ Concepts and Skills-Summer Activities 3 cr. hrs.
P ED 241 Motor Learning 2 cr. hrs.
P ED 251 Field Sports 2 cr. hrs.
P ED 252 Racquet Sports 2 cr. hrs.
P ED 253 Lifetime Sports 2 cr. hrs.
P ED 254 Individual Sports 2 cr. hrs.
P ED 258 Team Sports 2 cr. hrs.
P ED 300 Adapted Physical Education 2 cr. hrs.
P ED 361 Perceptual Motor Foundations and Sport Skill Development 4 cr. hr.
P ED 435 Curriculum: Physical Education K-12 3 cr. hrs.
DANC 120 Fundamentals of Movement Through Dance 1 cr. hr.
DANC 257 Rhythms 2 cr. hrs.
DANC 362 Dance for the Elementary School 2 cr. hrs.
Directed Electives: 3 cr. hrs.
DANC 224 Ballet I 1 cr. hr.
P ED 147 Water Safety Instructor 2 cr. hrs.
P ED 149 Gymnastics II 1 cr. hr.
P ED 255 Techniques in Sport Fishing 1 cr. hr.
P ED 268 Beginning Football 1 cr. hr.
P ED 465 Scientific Principles of Conditioning 2 cr. hrs.
P ED 301 Foundations of Outdoor Leadership 3 cr. hrs.
or ESM 301 Foundations of Outdoor Leadership

Professional Courses: 31 cr. hrs.
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 211 or 212 Educational Psychology Elem. or Secondary 5 cr. hrs.
TED 420 School and Society 3 cr. hrs.
TED 422 Content Area Literacy in Middle/Secondary School 3 cr. hrs.
TED 435 Techniques of Middle/Secondary Education: Physical Ed. 3 cr. hrs.
TED 475 Student Teaching: K-12 12 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.

Option II: Health and Human Performance Studies, minor required (non-certifiable) 34 Total Credits
Requirements: 27 cr. hrs.
HEAL 263 Human Anatomy 3 cr. hrs.
HEAL 366 Exercise Physiology 4 cr. hr.
P ED 161 Intro to Health and Human Performance 2 cr. hrs.
P ED 201 Outdoor Education Concepts and Skills-Summer Activities 3 cr. hrs.
P ED 354 Biomechanics 3 cr. hrs.
P ED 360 Test and Measurement in Physical Education 2 cr. hrs.
P ED 450 Organization and Administration of Physical Education and Athletics 2 cr. hrs.
P ED 452 History and Philosophy of Physical Education and Sport 3 cr. hrs.
P ED 465 Scientific Principles of Conditioning 2 cr. hrs.
SFED 200 First Aid and Basic Life Support 3 cr. hrs.

Directed Electives: 7 cr. hrs.
Choose 3 credits from A and 4 credits from B below.
A. Select 3 credits from the following:
   DANC 107 Social Dance 1 cr. hr.
   DANC 257 Rhythms 2 cr. hrs.
   P ED 105 Backpacking/Wilderness Awareness 1 cr. hr.
   P ED 106 Canoeing 1 cr. hr.
   P ED 251 Field Sports 2 cr. hrs.
   P ED 252 Racquet Sports 2 cr. hrs.
   P ED 253 Lifetime Sports 2 cr. hrs.
   P ED 254 Individual Sports 2 cr. hrs.
   P ED 255 Techniques in Sport Fishing 1 cr. hr.
   P ED 258 Team Sports 2 cr. hrs.
B. Select 4 credits from the following:
   HEAL 269 Wellness 3 cr. hrs.
   HEAL 315 Nutrition 3 cr. hrs.
   P ED 213 Care and Prevention of Athletic Injury 2 cr. hrs.
   P ED 241 Motor Learning 2 cr. hrs.
P ED 270 Athletic Training Practicum 2 cr. hrs.
P ED 300 Adapted Physical Education 2 cr. hrs.
ESM 300 Environmental Education 3 cr. hrs.
or P ED 301 Foundations of Outdoor Leadership or 3 cr. hrs.
P ED 371 Recreation Field Study 1--4 cr. hr.
P ED 380 Biomechanics/Kinesiology Seminar 2 cr. hrs.
P ED 460 Beginning Techniques in Lab Research 1 cr. hr.
SOCI 230 Sociology of Sport and Leisure 3 cr. hrs.
Professional courses 14 cr. hrs.
PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. hrs.
PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. hrs.
CPTS 105 Microcomputer Applications 2
P ED 300 Adapted Physical Education 2 cr. hrs.
P ED 471 PE Practicum 4 cr. hr.

Option III: Health Education, minor required (teacher certification) 68 Total Credits
Requirements: 34 cr. hrs.
P ED 161 Introduction to Health and Human Performance 2 cr. hrs.
SFED 200 First Aid and Basic Life Support 3 cr. hrs.
SFED 330 Safety in Home, School and Community: Promotion and Planning 2 cr. hrs.
SOWK 250 Use, Abuse, and Addiction 3 cr. hrs.
HEAL 263 Human Anatomy 3 cr. hrs.
HEAL 269 Wellness 3 cr. hrs.
HEAL 315 Nutrition 3 cr. hrs.
HEAL 350 Community Health 3 cr. hrs.
HEAL 366 Exercise Physiology 4 cr. hr.
HEAL 460 Teaching of Family Life and Sexuality Education 3 cr. hrs.
HEAL 465 Comprehensive School Health Education Programs 3 cr. hrs.
COUN 310 Counseling Skills for Teachers 2 cr. hrs.
Required Supporting Course: 3 cr. hrs.
GEOG/ESM 300 Environmental Education 3 cr. hrs.
Professional Education Requirements: 34 cr. hrs.
PSYC 330 Exceptional Child 3 cr. hrs.
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 212 Educational Psychology: Middle and Secondary Education 5 cr. hrs.
TED 420 School and Society 3 cr. hrs.
TED 422 Content Area Literacy in Middle/Secondary School 3 cr. hrs.
TED 423 Writing, Speaking and Listening in the Content Area 3 cr. hrs.
TED 429 Techniques of Secondary Education: Health Education 3 cr. hrs.
TED 473 Student Teaching: Middle Level 6 cr. hrs.
TED 474 Student Teaching: Secondary 6 cr. hrs.

Health Education Minor: 23 Total Credits
Required Courses: 23 cr. hrs.
HEAL 262 Human Anatomy and Physiology (or HEAL 263 & 366) 3 cr. hrs.
HEAL 269 Wellness 3 cr. hrs.
HEAL 315 Nutrition 3 cr. hrs.
HEAL 460 Teaching of Family Life and Sexuality Education 3 cr. hrs.
HEAL 465 Comprehensive School Health Education 3 cr. hrs.
SFED 200 First Aid and Basic Life 3 cr. hrs.
SPSY 310 Counseling for the Teacher 2 cr. hrs.
SOWK 250 Use, Abuse and Addiction 3 cr. hrs.
Required supporting course (choose one of the following):
GEOG/ESM 300 Environmental Education 3 cr. hrs.
Other professional courses and student teaching required for certification:
TED 429 Techniques of Secondary Education: Health Education 3 cr. hrs.
TED 473/474 Student Teaching 12 cr. hrs.
TED 414 Development of the Transescent-Required for Minnesota licensure 3 cr. hrs.
The Department of History and Philosophy offers courses and degrees for those who wish to obtain a liberal arts degree which teaches how to read, think, and write effectively. Thus, a liberal arts degree is the best preparation for careers in business, advertising, government, foreign service, international relations, publications, journalism, and human services. It also is indicated for those who wish to pursue a career specifically in the field of history including teaching at the elementary, secondary, or college level, or working in museums, archives and libraries. Students take courses in a variety of periods, areas and topics. Majors are encouraged to participate in an internship program for practical preparation for a career. Various options are also offered for study in other countries of the world as part of the degree. Majors are strongly urged to take a course in Women's Studies to truly round off their understanding of the human past. The Broad Field Social Studies Major is recommended for secondary teachers in Wisconsin and Minnesota (see page 120 and 163).

BA and BS Liberal Arts majors as listed on pages 34-35. BS Education majors as listed on pages 47-48.

History Major- Liberal Arts: 36 Total Credits
Major Requirements 15 cr. hrs.
HIST 101 Origins of Civilization 3 cr. hrs.
HIST 102 Origins of One World 3 cr. hrs.
HIST 103 U.S. History to 1877 3 cr. hrs.
HIST 104 U.S. History Since 1865 3 cr. hrs.
HIST 485 History Seminar (writing intensive) 3 cr. hrs.
Required Courses:
Select one of the following Non-Western History courses: 3 cr. hrs.
HIST 201 Introduction to Asian Civilization 3 cr. hrs.
HIST 202 Introduction to Latin American Civilizations 3 cr. hrs.
HIST 206 Native Americans and the United States 3 cr. hrs.
Directed Electives: 18 cr. hrs.
Select two advanced U.S. History courses (numbered 300 or above) 6 cr. hrs.
Select two advanced non-U.S. History courses (numbered 300 or above) 6 cr. hrs.
Courses numbered 200 or above 6 cr. hrs.
Courses numbered 300 or above 6 cr. hrs.

History Minor-Liberal Arts and Education: 24 Total Credits
Required Courses: 12 cr. hrs.
HIST 101 Origins of Civilization 3 cr. hrs.
HIST 102 Origins of One World 3 cr. hrs.
HIST 103 U.S. History to 1877 3 cr. hrs.
HIST 104 U.S. History Since 1865 3 cr. hrs.
Directed Electives: 12 cr. hrs.
Select four HIST courses numbered 200 or above

History-Broad Field Social Studies

The Broad Field Social Studies (BFSS) degree is the preferred degree for secondary teaching in the area of social studies. This degree offers many options and great versatility. The program requires that the student have a concentration (a major) in one of the social sciences and then additional work in the other social sciences. The concentration gives the degree maximum flexibility if the student does not continue in the field of education.

General Education Requirements as listed on pages pages 34-35 with the following exceptions:
Social and Behavioral Science:
POLS 114 American, National, State and Local Government
PSYC 101 General Psychology
TED 252 Foundations of Multicultural Education
ESM/GEOL 300 Environmental Education

Professional Secondary Education Requirements
See page 159. 37 Total Credits

History Emphasis
Major Requirements 66 Total Credits
Required Courses: 15 cr. hrs.
HIST 101 Origins of Civilization 3 cr. hrs.
HIST 102 Origins of One World 3 cr. hrs.
HIST 103 U.S. History to 1877 3 cr. hrs.
HIST 104 U.S. History Since 1865 3 cr. hrs.
HIST 485 History Seminar (writing intensive) 3 cr. hrs.
Directed Electives: 21 cr. hrs.
Select two advanced U.S. History courses (numbered 300 or above) 6 cr. hrs.
Select two advanced non-U.S. History courses (numbered 300 or above) 6 cr. hrs.
Select two History courses (numbered 300 or above) 6 cr. hrs.
Select one History course (numbered 200 or above) 3 cr. hrs.
Distribution: 30 cr. hrs.
Select 30 credits from at least two of the following:
Anthropology, Economics, Geography, Political Science, Psychology, Sociology
9 credits from each of two of the above areas 18 cr. hrs.
3 credits from each of four of the above areas 12 cr. hrs.

Broad Field Social Science Minor
For the Social Science minor requirements refer to page 162.
Honors Program is designed to meet the educational needs of students who have an outstanding record of academic achievement and a true sense of intellectual adventure. It allows students to experience a variety of course types and educationally related experiences while gaining academic credit. Students enrolled in the program may choose Honors sections of many general education classes, take introductory and advanced Honors seminars, participate in Honors colloquia, complete an Honors thesis/project, enroll in a service-learning experience for credit and receive credits for participation in the intellectual and creative life of the UW-RF community and elsewhere. All of these experiences are gained while still keeping within the major and minor requirements of an Honors student's academic program.

Honors Admission Requirements
Incoming freshmen must have a composite ACT score of 27 or higher and/or have graduated in the top 10% of their high school class. Sophomores, juniors, or seniors may enroll if their cumulative grade point average is 3.3 or higher. Students must maintain a 3.3 cumulative grade point average and complete at least two Honors program credits per year to remain in the program. The UW-RF Honors program consists of 18 Honors program credits, all of which are possible to accumulate within the 120 minimum credits necessary to graduate. Requirements for completing the Honors Program include at least 18 honors program credits and no history of academic dishonesty. Honors program seminars, colloquia, and courses will meet General Education or Liberal Arts requirements whenever applicable.

Sections of the following courses may be made available on a rotational basis to Honors Program students:
Fine Arts ART 100, MUS 100, SCTA 105
Social Science ANTH 100, ECON 100, ESM 105, POLS114, SOCI 100
Science BIOL 100, CHEM 111 (discussion groups and/or labs), GEO 101, PHYS 117, 151, 161 (discussion groups and/or labs)
Diversity TED 252-Multicultural Education

Honors Requirements: 18 Total Credits
Required Courses: 2-7 cr. hrs.
HON 181 Honors Seminar I 1 cr. hr.
HON 498 Honors Thesis/Project 1-6 cr. hrs.
Directed Electives:
Honors Courses 11 cr. hrs.
ENG 115 Accelerated Freshman English 3 cr. hrs.
HUM 255 Arts and Ideas I 4 cr. hr.
HUM 256 Arts and Ideas II 4 cr. hr.
Seminar, Colloquia, and Contracted Credits (variable credits) 1-5 cr. hrs.
Honors Program students enrolled in a non-honors course may contract with the instructor to earn honors credit(s) for different work (i.e. in greater depth). These credits will be recorded as honors
Colloquia 0-2 cr. hrs. Colloquia are optional and repeatable. They are offered in various subject areas and may be supplements to existing courses or sequences, e.g., HON 166 and 167 might be offered by the mathematics department as supplements to MATH 166 and 167.

Honors Thesis/Project 1-6 cr. hrs. Required of all participants during junior or senior year. Participants must submit a project proposal outlining their research hypotheses, methodologies, and expected outcomes, and suggest appropriate faculty reviewers to the Honors Director for approval before commencing their work. Each project will be evaluated by three faculty chosen by the student and approved by the Honors Director. Projects may be graded pass/fail at the student's request. Projects undertaken for departmental senior seminars may be accepted as honors theses/projects at the discretion of the department and the Honors Director.

Service Learning Component 1-6 cr. hrs. Service learning in this context means unpaid volunteer work that will benefit the community and provide a significant learning experience. Service learning is based on the rationale that learning occurs through reflection on the service. At least one credit of service learning is required; one credit equals 45 hours of service learning. Service learning hours must be documented as to the amount of time contributed and the learning component completed. Participants must submit a proposal for service learning project(s) to the Honors Director for their approval prior to the service learning activity. These proposals will describe the service learning activity, outline its connection to the student's course work, and include the signature of the student's proposed field supervisor. Service learning hours may be planned and carried out individually, through the Honors Club, or with another organization. Honors program students are encouraged to arrange service learning activities through other organizations they belong to in order to stimulate participation by other university community members.

Events 0-2 cr. hrs. This component is meant to encourage Honors Program participants to engage in the intellectual and creative life of the UW-River Falls community and elsewhere. Approved events will include attendance or participation in professional meetings, lectures, concerts, plays, and art exhibits. Participants must submit an event proposal to the Director prior to the events describing the events to be attended and, wherever possible, drawing connections between them and the participant's course of study. Five events (12 hours minimum) equal one credit. Participants must provide a portfolio of short reaction papers to each event and appropriate evidence of participation in order to earn credit.
General Education Requirements as listed on pages pages 26-27.

Foundation Courses in Agriculture 12 cr. hrs.
AGRN 161 Introduction to Plant Science 3 cr. hrs.
or HORT 161 Introduction to Plant Science or 3 cr. hrs.
AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. hrs.
SOIL 210 Introductory Soil Science 3 cr. hrs.
AGEC230 Agricultural Economics I 3 cr. hrs.
or FDSC 112 Introduction to Food Science or 3 cr. hrs.

Horticulture Major: 69-71 Total Credits
Required HORT Courses: 16 cr. hrs.
HORT 169 Introduction to Horticulture 3 cr. hrs.
HORT 200 Plant Propagation 3 cr. hrs.
HORT 310 Greenhouse Management 3 cr. hrs.
HORT 352 Ornamental Plants 3 cr. hrs.
HORT 455 Turfgrass Science and Management 3 cr. hrs.
HORT 485 Senior Seminar in Horticulture 1 cr. hr.
Required Related Courses: 20 cr. hrs.
SOIL 311 Soil Fertility 4 cr. hr.
BIOL 314 Plant Pathology 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
AGBI 251 Agricultural Biochemistry 3 cr. hrs.
AGRN 435 Crop Physiology 4 cr. hr.
AGRN 257 Genetics 3 cr. hrs.
or ANSC 257 Genetics or 3 cr. hrs.
Horticulture Options (Choose one)
Professional Horticulture Option 33-35 cr. hrs.
BIOL 333 Entomology 3 cr. hrs.
HORT 327 Vegetable Science and Production (writing intensive) 4 cr. hr.
HORT 347 Fruit Science and Production (writing intensive) 4 cr. hr.
HORT 420 Floriculture (writing intensive) 4 cr. hr.
HORT 270/370 Horticulture Internship 4 cr. hr.
Select one design-related course from the following:
HORT 245 Interior Plantscapes 3 cr. hrs.
or HORT 250 Principles of Landscape Design 3 cr. hrs.
or HORT 268 Herbaceous Perennials 3 cr. hrs.
Select one plant production-related course from the following:
HORT 369 Plant Tissue Culture: Theory and Practice 3 cr. hrs.
or HORT 452 Aboriculture/Nursery Management (writing intensive) 3 cr. hrs.

Landscape Design and Contracting Option 33 cr. hrs.
AGEN 333 Landscape Construction 3 cr. hrs.
AGEN 355 Irrigation and Drainage 3 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
HORT 250 Principles of Landscape Design 3 cr. hrs.
HORT 268 Herbaceous Perennials 3 cr. hrs.
HORT 270/370 Horticulture Internship 4 cr. hr.
HORT 452 Aboriculture/Nursery Management (writing intensive) 3 cr. hrs.
GENG 121 Engineering Drawing 2 cr. hrs.
GENG 235 Surveying 3 cr. hrs.
GENG 368 CAD Applications 2 cr. hrs.
HORT 327 Vegetable Science and Production (writing intensive) 4 cr. hr.
or HORT 347 Fruit Science and Production (writing intensive)
or 4 General Electives 7-10

Business Emphasis
The Business Emphasis is a suggested series of courses that fit together well and complement the horticulture major. It is not necessary to take all of the courses. The courses are taken in addition to either of the two options. The emphasis designation is not printed on the student’s transcript.
AGEC 360 Farm Management 3 cr. hrs.
Select one from:
ACCT231 Principles of Accounting I 3 cr. hrs.
AGEC305 Agricultural Business Accounting 3 cr. hrs.
Select one from:
BLAW 265 Business Law I 3 cr. hrs.
AGEC 345 Agricultural Law 3 cr. hrs.
Select two from:
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
AGEC 368 Professional Selling 3 cr. hrs.
AGEC 468 Agribusiness Firm Management 3 cr. hrs.
MNGT 265 The Computer in Business 3 cr. hrs.
FINC 345 Managerial Finance 3 cr. hrs.

Horticulture Minor: 22-23 Total Credits
Required Courses: 19 cr. hrs.
HORT 169 Introduction to Horticulture 3 cr. hrs.
HORT 200 Plant Propagation 3 cr. hrs.
HORT 310 Greenhouse Management 3 cr. hrs.
HORT 352 Ornamental Plants 3 cr. hrs.
BIOL 314 Plant Pathology 3 cr. hrs.
Select one from:
HORT 327 Vegetable Science and Production 4 cr. hr.
HORT 347 Fruit Science and Production 4 cr. hr.
Directed electives: 3-4 cr. hrs.
(any HORT course, consult with horticulture faculty)
Hydrogeology Minor: 21 Total Credits
Required Courses 18 cr. hrs.
ESM 360 Applied Hydrology and Water Quality 4 cr. hr.
GEOL 445 Hydrogeology 4 cr. hr.
SOIL 460 Soil Physics 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
Electives-Select from the following: 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. hr.
CHEM 452 Instrumental Analysis 3 cr. hrs.
BIOL 324 Microbiology 4 cr. hr.
ESM 413 Environmental Analysis 4 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hr.
GEOL 362 Stratigraphy and Sedimentation 4 cr. hr.
GEOL 441 Geophysics 4 cr. hr.
The International Studies Minor is designed to complement a student's major. Given the global economy that is rapidly evolving, training in international studies is likely to increase the employment potential of almost any student. Students completing the minor will acquire a firm understanding of the critical international issues confronting our global society including, but not limited to, armed conflict; economic interdependence; world food, environmental, and population issues; political change; and human rights. They will be able to critically evaluate these problems, and proposed solutions to them, from an interdisciplinary perspective the minor draws on expertise from all of the colleges on campus. Students completing the minor will also obtain a greater appreciation for and understanding of the key cultural differences that exist around the world. They will develop basic linguistic skills and can participate in overseas study programs as an optional part of the minor’s curriculum. This minor should be particularly attractive to students who wish to learn more about international issues and/or want to pursue careers with an international emphasis. It can be completed readily as either a first or second minor. Contact the Program Coordinator and/or consult the website at http://www.uwrf.edu/international_studies/welcome.html for more information.

International Studies Minor: 24 Total Credits

Foreign Language Requirement: (credits not counted as part of minor) 0-8 cr. hrs.
This requirement can be fulfilled in one of the following ways:
1. Completing the first two semesters of any language offered at UW-RF (Chinese, French, German, Japanese, Spanish)
2. Testing out of the first semester and completing the second. A student may take the testout based on either high school language classes or study undertaken independently.
3. Testing out of the entire year. The student is encouraged to complete the first semester of the second year, thereby receiving credits for the testout; otherwise, the language requirement will be considered fulfilled, but no credit will appear on the transcript.
4. Transferring the equivalent of a first-year language sequence in any foreign language from another university.

Required Courses: 12 cr. hrs.
INTS 200 Introduction to International Studies 3 cr. hrs.
AGEC 250 World Food and Population 3 cr. hrs.
GEOG 120 Human Geography 3 cr. hrs.
POLS 260 Introduction to International Relations 3 cr. hrs.

Directed Electives: 12 cr. hrs.
Select 12 credits, spread over at least three of the seven categories below. No more than six credits can come from any one of categories A-F, and only three credits can come from category G.
Credit for INTS 379, 389, 490, or 499 can be applied to these categories after consultation with the Program Coordinator.

Category A up to 6 cr. hrs.
ART 314 Art of India, China, and Japan 2 cr. hrs.
ART 318 Latin American Art 2 cr. hrs.
ENGL 341 European Literature 3 cr. hrs.
ENGL 428 Modern British Literature: 1940-Present 3 cr. hrs.
ENGL 441 Twentieth Century International Literature 3 cr. hrs.
HUM 256 Arts and Ideas II 4 cr. hr.
HUM 261 World Arts 1 cr. hr.
MUS 300 World Music 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.

Category B up to 6 cr. hrs.
HIST 303 Women's History: Europe 3 cr. hrs.
HIST 305 Women's History: Global Perspectives 3 cr. hrs.
HIST/PHIL/POLS 308 Western Political Thought: The Renaissance through Marx 3 cr. hrs.
HIST/PHIL/POLS 309 Western Political Thought: Nietzsche to the 20th Century 3 cr. hrs.
HIST 328 World War II to the Cold War 3 cr. hrs.
HIST 330 Revolutions in Modern History 3 cr. hrs.
HIST/POLS 349 Modern Middle East History and Politics 3 cr. hrs.
HIST 359 U.S. History from 1945 3 cr. hrs.
HIST/POLS 367 History of U.S. Foreign Policy 3 cr. hrs.
HIST 436 History of Colonialism and Imperialism 3 cr. hrs.
POLS 344 Politics of the Developing World 3 cr. hrs.
POLS 346 Politics of Western Europe 3 cr. hrs.
POLS 348 Politics of East Asia 3 cr. hrs.
POLS 365 American Foreign Policy 3 cr. hrs.
POLS 369 International Political Economy 3 cr. hrs.
POLS 377 The United Nations 1 cr. hr.

Category C up to 6 cr. hrs.
ANTH/SOCI 211 Sociology of Childhood 3 cr. hrs.
ANTH/SOCI 221 Global Perspectives on Women 3 cr. hrs.
ANTH/SOCI 338 Global Perspectives on Health and Disease 3 cr. hrs.
ANTH/SOCI 348 Faces of Culture 3 cr. hrs.
ANTH/SOCI 435 Social and Cultural Change 3 cr. hrs.
GEOG 220 Economic Geography 3 cr. hrs.
GEOG 242 Canada 3 cr. hrs.
GEOG 340 Europe 3 cr. hrs.
GEOG 342 Latin America 3 cr. hrs.
GEOG 343 Africa 3 cr. hrs.
GEOG 344 Asia and Oceania 3 cr. hrs.
SOCI 340 Sociology of Rural Life 3 cr. hrs.

Category D up to 6 cr. hrs.
ACCT311 International Accounting 3 cr. hrs.
AGEC441 Agricultural Policy II 3 cr. hrs.
AGRN 462 Agricultural Ecology 2 cr. hrs.
ECON 328 Domestic Topics in Third World Economic Development 3 cr. hrs.
ECON 329 International Topics in Third World Economic Development 3 cr. hrs.
ECON 340 Contemporary International Trade Issues 3 cr. hrs.
ECON/FINC 342 International Finance 3 cr. hrs.
ECON 344 Comparative Economic Systems 3 cr. hrs.
ECON 354/MNGT 355 International Business 3 cr. hrs.
ECON/MKTG 356 International Marketing 3 cr. hrs.
JOUR 460 International Communication 3 cr. hrs.
MNGT 310 Culture and Business 3 cr. hrs.
MNGT 380 International Business Seminar 3 cr. hrs.

Category E up to 6 cr. hrs.
FREN 301 French Conversation and Composition 3 cr. hrs.
FREN 302 French Conversation and Composition II 3 cr. hrs.
FREN 341 French Civilization 3 cr. hrs.
FREN 342 Modern France and Francophone Cultures 3 cr. hrs.
FREN 351 Survey of French Literature to 1800 3 cr. hrs.
FREN 352 Survey of French Literature 1800 to Present 3 cr. hrs.
FREN 401 Advanced French Communication 3 cr. hrs.
FREN 451 French Prose Fiction 3 cr. hrs.
or FREN 452 French Poetry 3 cr. hrs.
or FREN 453 French Drama 3 cr. hrs.
GERM 275 Business German 3 cr. hrs.
GERM 301 German Conversation and Composition 3 cr. hrs.
GERM 302 German Conversation and Composition II 3 cr. hrs.
GERM 341 German Civilization 3 cr. hrs.
GERM 342 Modern German-Speaking Cultures 3 cr. hrs.
GERM 351 Survey of German Literature to Classicism (1800) 3 cr. hrs.
GERM 352 Survey of German Literature from Classicism (1800) to Present 3 cr. hrs.
GERM 401 Advanced German Communication 3 cr. hrs.
GERM 451 German Drama and Theater 3 cr. hrs.
or GERM 452 German Tale, Short Story, and Novella 3 cr. hrs.
or GERM 453 German Poetry 3 cr. hrs.
SPAN 301 Spanish Composition and Conversation 3 cr. hrs.
SPAN 302 Spanish Composition and Conversation II 3 cr. hrs.
SPAN 341 Spanish Civilization to 1800 3 cr. hrs.
SPAN 342 Spanish Civilization 1800 to Present 3 cr. hrs.
SPAN 345 Latin American Civilization to 1800 3 cr. hrs.
SPAN 346 Latin American Civilization 1800 to Present 3 cr. hrs.
SPAN 351 Survey of Spanish Literature to 1800 3 cr. hrs.
SPAN 352 Survey of Spanish Literature 1800 to Present 3 cr. hrs.
SPAN 355 Survey of Latin American Literature to 1800 3 cr. hrs.
SPAN 356 Survey of Latin American Literature 1800 to Present 3 cr. hrs.
SPAN 401 Advanced Spanish Communication 3 cr. hrs.
SPAN 452 Advanced Spanish Literature 3 cr. hrs.
SPAN 455 Advanced Latin American Literature 3 cr. hrs.

Category F up to 6 cr. hrs.
ART/HIST 375 Study Tour of Northern France and the Lowlands 1 cr. hr.
ART/ENGL 376 Experience Greece: Culture Past and Present 1-3 cr. hrs.
HIST 371 Study Tour Research 1-3 cr. hrs.
INTS 370 International Study Tour 1-3 cr. hrs.
INTS 377 Semester Abroad 6 cr. hrs.
MODL 376 Mexico: A Cultural Experience 3 cr. hrs.
MODL 377 Foreign Study 6 cr. hrs.
271 CAFES depts. International Internship 4 cr. hr.
TED Education Teaching courses Overseas Practice Teaching 6 cr. hrs.
378 within depts. Semester Abroad Research 3-6 cr. hrs.

Category G up to 3 cr. hrs.
DANC 100 History/Appreciation of Dance 3 cr. hrs.
ESM 105 Introduction to Environmental Studies 3 cr. hrs.
GEOG 212 Weather and Climate 3 cr. hrs.
GEOG 214 World Patterns of Plants and Animals 3 cr. hrs.
GEOL 202 Oceanography 2 cr. hrs.
GEOL 269 Environmental Geology 2 cr. hrs.
HIST 102 Origins of One World 3 cr. hrs.
HIST 201 Introduction to Asian Civilization 3 cr. hrs.
HIST 202 Introduction to Latin American Civilizations 3 cr. hrs.
POLS 245 Introduction to Comparative Politics 3 cr. hrs.
Journalism (JOUR)
Department of Journalism
College of Arts and Sciences

330 Kleinpell Fine Arts
(715) 425-3169
FAX: (715) 425-0658

Colleen Callahan-Chair, Patricia Berg, Sandra Ellis, Michael Norman. Adjuncts: Richard McNamara, Lorin Robinson

The Department of Journalism is one of 108 programs in the United States accredited by the Accrediting Council on Education in Journalism and Mass Communications. In order to maintain accreditation and to fulfill the department mission of providing journalism students with a broad liberal arts education, all majors must take a minimum of 80 credit hours outside journalism and mass communication courses, including a minimum of 65 credit hours in the liberal arts and sciences. A student majoring in journalism may not double major or minor in the Mass Communication Emphasis offered in the SCTA department. A journalism major may select the News-Editorial (print) emphasis or Broadcast emphasis. All journalism majors must take five supporting courses outside the major, specified under the Supporting Courses category. The five courses may be counted anywhere in the student’s degree program: General Education, Liberal Arts, a second major, a minor, or general electives.

Journalism and Secondary Education.
Students interested in teaching journalism and/or serving as a news or yearbook advisor at the secondary school may major or minor in journalism and select the News-Editorial (print) emphasis or the Broadcast emphasis, and must take a second teaching area major such as English or broad area studies. The student should also consult with the dean of the College of Education for specific teaching requirements.

Journalism and Agriculture. This program is designed for students who wish to pursue a career in agricultural journalism. The student will develop a major in journalism and a second major or minor in the College of Agriculture, Food and Environmental Sciences. Students may select the News-Editorial (print) emphasis or Broadcast emphasis. Journalism majors may substitute AGED 230 (Agricultural News Writing) for three credits of journalism free electives.

Marketing Communications Major. Journalism is one of seven academic departments participating in the interdisciplinary major in Marketing Communications. For more information about this major, see page 133.

Film Studies Minor. Journalism is one of the departments from which courses may be taken for the Minor in Film Studies. For more information about this minor, see page 108.

Professional Writing Minor. Journalism is one of the subject fields included in the Department of English Professional Writing Minor. For more information about this minor, see page 155.

International Studies Minor. Journalism is one of the departments offering a directed elective (JOUR 460) that may be taken for the International Studies Minor. For more information about this minor, see page 126.

BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.
Journalism Major/News-Editorial Emphasis  
Major Requirements 35 Total Credits  
Core Requirements: 23 cr. hrs.  
JOUR 101 Introduction to Mass Communication 3 cr. hrs.  
JOUR 112 Writing for the Mass Media 3 cr. hrs.  
JOUR 113 Beginning Reporting for the Print Media 3 cr. hrs.  
JOUR 180 Freshman Seminar 1 cr. hr.  
JOUR 251 Advanced News Reporting I 3 cr. hrs.  
JOUR 252 Advanced News Reporting II 3 cr. hrs.  
JOUR 351 Editing for Print Media 3 cr. hrs.  
JOUR 465 Mass Communication Law 3 cr. hrs.  
JOUR 480 Senior Seminar 1 cr. hr.  
Directed Electives: Select one 3 cr. hrs.  
JOUR 320 Journalism and Public Opinion 3 cr. hrs  
JOUR 345 History of Mass Communication 3 cr. hrs.  
JOUR 455 Mass Media and Society 3 cr. hrs.  
JOUR 460 International Communication 3 cr. hrs.  
Journalism Electives: 9 cr. hrs.  
Required Supporting Courses:  
POLS 253 State and Local Politics  
or POLS 211 Government and Politics in Minnesota and Wisconsin  
POLS Any international course.  
HIST 104 U.S. History Since 1865  
HIST Any international course.  
ECON 201 Principles of Microeconomics  
or ECON 202 Principles of Macroeconomics  

Journalism Minor/News-Editorial Emphasis: 24 Total Credits  
Core Requirements: 18 cr. hrs.  
JOUR 101 Introduction to Mass Communication 3 cr. hrs.  
JOUR 112 Writing for the Mass Media 3 cr. hrs.  
JOUR 113 Beginning Reporting for the Print Media 3 cr. hrs.  
JOUR 251 Advanced News Reporting I 3 cr. hrs.  
JOUR 351 Editing for Print Media 3 cr. hrs.  
JOUR 465 Mass Communication Law 3 cr. hrs.  
Directed Electives: Select one 3 cr. hrs.  
JOUR 320 Journalism and Public Opinion 3 cr. hrs.  
JOUR 345 History of Mass Communication 3 cr. hrs.  
JOUR 455 Mass Media and Society 3 cr. hrs.  
JOUR 460 International Communication 3 cr. hrs.  
Journalism Electives: 3 cr. hrs.  

Journalism Major/ Broadcast Emphasis: 35 Total Credits  
Core Requirements: 23 cr. hrs.  
JOUR 101 Introduction to Mass Communication 3 cr. hrs.  
JOUR 112 Writing for the Mass Media 3 cr. hrs.  
JOUR 115 Broadcast News Writing 3 cr. hrs.  
JOUR 120 Radio and Television Field Production 3 cr. hrs.  
JOUR 180 Freshman Seminar 1 cr. hr.  
JOUR 241 Broadcast News Reporting and Editing 3 cr. hrs.
JOUR 242 Television News 3 cr. hrs.
JOUR 465 Mass Communication Law 3 cr. hrs.
JOUR 480 Senior Seminar 1 cr. hr.
Directed Electives: Select one 3 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
JOUR 460 International Communication 3 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
JOUR 460 International Communication 3 cr. hrs.
Journalism Electives: 9 cr. hrs.
Required Supporting Courses:
POLS 253 State and Local Politics
or POLS 211 Government and Politics in Minnesota and Wisconsin
POLS Any international course
HIST 104 U.S. History Since 1865 HIST Any international course
ECON 201 Principles of Microeconomics or
ECON 202 Principles of Macroeconomics

Journalism Minor/ Broadcast Emphasis: 24 Total Credits
Core Requirements: 18 cr. hrs.
JOUR 101 Introduction to Mass Communication 3 cr. hrs.
JOUR 112 Writing for the Mass Media 3 cr. hrs.
JOUR 115 Broadcast News Writing 3 cr. hrs.
JOUR 120 Radio and Television Field Production 3 cr. hrs.
JOUR 241 Broadcast News Reporting and Editing 3 cr. hrs.
JOUR 465 Mass Communication Law 3 cr. hrs.
Directed Electives: Select one 3 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
JOUR 460 International Communication 3 cr. hrs.
Journalism Electives: 3 cr. hrs.
The land use planning major is designed for those students wishing to pursue a career in public or private planning, zoning, administration/management and sustainable development. The curriculum provides instruction in foundational planning principles and practices, as well as hands-on technical training. The course content focuses on planning issues at the rural/urban interface. It is an excellent major to combine with a wide variety of minors (e.g., cartography/GIS, business administration, political science, etc.) to develop a unique professional niche.

General Education Requirements as listed on pages pages 26-27.

Land Use Planning Major
Land Use Planning Core 32-34 cr. hrs.
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. hrs.
ESM 270 Internship I 2-4 cr. hr.
ESM 303 Environmental Policies and Administration 3 cr. hrs.
ESM 307 Multicultural Perspectives on the Environment 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 363 GIS Application in Resource Management 3 cr. hrs.
ESM 411 Site Planning and Development 4 cr. hr.
ESM 435 Advanced Land Use Planning and Design 4 cr. hr.
ESM 485 Seminar in Resource Management 1 cr. hr.
SOIL 210 Introductory Soil Science 3 cr. hrs.
Required Supporting Courses 15 cr. hrs.
GENG 235 Surveying 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 360 Introduction to Geographic Information Systems 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
or SCTA 211 Public Speaking 3 cr. hrs.
or AGED 202 Leadership and Group Dynamics 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
or ENGL 266 Business Writing 3 cr. hrs.
Directed Electives: 19-23 cr. hrs.
AGEC 230, 231, 250, 320, 345, 355, 440, 441, 450; AGEN 150, 240, 325, 365, 425, 443; ANTH 205; BIOL 310, 314, 320, 333, 344, 350, 354, 355, 360, 434, 444; ECON All except 100; ESM 109, 343, 360, 365; ETHN 200; FINC 342, 350; GENG 121, 201, 236, 265, 368; GEOG All except 120, 250, 360; GEOL 445; HEAL 350; HIST All except 102, 103, 104; HORT All; INTS 377, 378; MATH 156, 216, 226, 326, 356, 357; MGMT 150, 205, 310, 326, 355; MODL 376, 377; PHIL 240, 303, 304; POLS All except 114, 260; SCTA 106, 111, 207, 222; SOCI All except 100; SOIL All
Land Use Planning Minor: 23 Total Credits
Required Courses:
ESM 151 Introduction to Land Use Theory and Practice 3 cr. hrs.
ESM 303 Environmental Policies and Administration 3 cr. hrs.
ESM 333 Remote Sensing of Natural Resources 3 cr. hrs.
ESM 363 GIS Applications in Resource Management 3 cr. hrs.
ESM 411 Site Planning and Development 4 cr. hr.
ESM 435 Advanced Land Use Planning and Design 4 cr. hr.
GEOG 250 Cartography I 3 cr. hrs.
The Language Arts/Reading minor is one of eight recommended by the Department of Public Instruction and the College of Education and Professional Studies for Elementary Education majors who must choose a minor. They select this minor to provide breadth of understanding and skills in English (literature, language and writing), speech, and reading. Course work will support both the specific teaching of these areas and also the teaching of other subjects (i.e. reading, speaking, and writing across the curriculum). Students who choose this minor should plan their programs with Dr. Nicholas Karolides, advisor for the minor.

Language Arts/Reading Minor: 24 Total Credits
Required Courses: 18 cr. hrs.
ENGL 321 English Language: History and Culture 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 350 Children's Literature: Issues and Trends 3 cr. hrs.
ENGL 361 Composition Theory 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
or SCTA 327 Children's Theatre and Puppetry
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.

Directed Electives 6 cr. hrs.
Select two of the following courses:
ENGL 233 Introduction to Poetry 3 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
or SCTA 327 Children's Theatre and Puppetry
SCTA 313 Intercultural Communication 3 cr. hrs.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.
SCTA 407 Listening Instruction 3 cr. hrs.
TED 410 Early Child/Language Arts 3 cr. hrs.
Marketing Communications (MARC)
Interdisciplinary

336 Kleinpell Fine Arts Building (715) 425-3899; FAX (715) 425-0658 www.uwrf.edu/marcomm/

Stephen Olsen-Chair, Marketing Communications; Richard Beckham, English; Michael Padgett, art; Jacque Foust, business administration; Tamia Trulson, agricultural education; Lewis May, agricultural economics; Michael Norman, journalism; James Pratt, speech communication and theatre arts.

The interdisciplinary Marketing Communications major integrates the activities of advertising, public relations, sales promotion, direct marketing, personal selling and cybermarketing into a single professional field of expertise. Students will develop knowledge and skills in oral, written and visual modes of communication. In addition to an introductory course and senior seminar in marketing communications, students will take courses from as many as seven departments in three colleges. Practical experience with current technology tools and a required internship program ensure that students have not only strong academic preparation, but also practical experience in marketing communications activities. A student may complete the major in Marketing Communications in the College of Arts and Sciences, the College of Agriculture, Food and Environmental Sciences, or in the College of Business and Economics. Please consult the dean of the respective college for college-specific course requirements. It is recommended that a student completing the major in CBE or CAFES have a minor in that college. A minor is not offered in Marketing Communications.

General Education Requirements:
Arts and Sciences as listed on pages 34-35,
Agriculture, Food and Environmental Sciences as listed on pages 26-27,
or Business and Economics as listed on pages 44-45, with the following exceptions:
Communication: SCTA 116 Business and Professional Communication
Math: Proficiency in understanding statistics is required and may be demonstrated by completing one of the following: MATH 216, PSYC 201, ECON 226, MATH 226, AGEC 320, ANSC 341, or an equivalent course. Completion of a listed statistics course may fulfill the general education mathematics requirement. See your advisor for further information. Prior to graduation, students must complete and present a professional portfolio for approval to the Marketing Communications Unit. An internship or approved directed work experience is required. It is the student’s responsibility to originate an internship or directed work experience that meets Marketing Communications departmental criteria. Internships and directed work experiences must be approved by the Marketing Communications internship supervisor before the work is done. Students must maintain a 2.50 grade point average in the Marketing Communications major.

Marketing Communications Major: 42 Total Credits
Core Requirements: 25-28 cr. hrs.
JOUR 101 Intro to Mass Communications
or AGED 110 Agricultural Communications 3 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.
JOUR112 Writing for the Mass Media 3 cr. hrs.
MARC 200 Introduction to Marketing Communications 3 cr. hrs.
MARC 480 Seminar in Theory and Methods of Marketing Communications 3 cr. hrs.
MKTG 311 Principles of Marketing for Marketing Communications Majors 3 cr. hrs.
MKTG 312 Consumer Behavior 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
Choose one of the following internship courses:
MARC 379 Internship in Marketing Communications
or MARC 279 Cooperative Education/Directed Work Experience
or 270/370 if enrolled in CAFES, any CAFES department internship
MARC 279/379 may be combined and/or repeated for a total of 4 credit hours. 2-4 cr. hr.
Directed Electives: 14-17 cr. hrs.
Writing Electives—Select one from:
AGED/JOUR 230 Agricultural News Writing 3 cr. hrs.
ENGL 266 Business Writing 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
JOUR 351 Editing for Print Media 3 cr. hrs.
Visual Electives—Select one from:
ART 235 Intro to Black and White Photography 3 cr. hrs.
JOUR 120 Radio and TV Field Production 3 cr. hrs.
JOUR 265 Beginning Photography 3 cr. hrs.
SCTA 160 TV Studio Production 3 cr. hrs.
SCTA 260 Electronic Field Production 3 cr. hrs.
Marketing/Promotion Electives—Select one from:
AGEC 368 Professional Selling 3 cr. hrs.
MKTG 365 Marketing Research 3 cr. hrs.
JOUR 260 Principles of Public Relations 3 cr. hrs.
JOUR 363 Advertising Principles 3 cr. hrs.
Other Electives—Select from the following courses or consult with department chair or advisor for additional elective choices to total 42 credits required in the major:
Please check the course descriptions in this catalog for course prerequisites.
AGEC 355 Agricultural Markets and Prices 3 cr. hrs.
AGEC 368 Professional Selling 3 cr. hrs.
AGED 230 Agricultural News Writing 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 303 Advertising Design II 3 cr. hrs.
ENGL 266 Business Writing 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
JOUR 120 Radio and Television Field Production 3 cr. hrs.
JOUR 230 Agricultural News Writing 3 cr. hrs.
JOUR 260 Introduction to Public Relations 3 cr. hrs.
JOUR 261 Public Relations Methods 3 cr. hrs.
JOUR 265 Beginning Photography 3 cr. hrs.
JOUR 351 Editing for Print Media 3 cr. hrs.
JOUR 362 Advertising Principles 3 cr. hrs.
JOUR 363 Advertising Methods 3 cr. hrs.
JOUR 465 Mass Communications Law 3 cr. hrs.
MKTG 352 Business to Business Marketing 3 cr. hrs.
MKTG 355 International Marketing 3 cr. hrs.
MKTG 365 Marketing Research 3 cr. hrs.
PHIL 316 Media Ethics 3 cr. hrs.
SCTA 316 Organizational Communication 3 cr. hrs.
Mass Communication
Department of Speech Communication and Theatre Arts
College of Arts and Sciences

B-24 Kleinpell Fine Arts Building
(715) 425-3971

Margaret M. Swanson-Chair, Suzanne Hagen, Robin Murray, James Pratt, Ronald Snell, Kenneth Stofferahn, Richard Vogel, Barbara L. Werner, James Zimmerman

Mass Communication Minor: 24 Total Credits

Required Courses 12 cr. hrs.
SCTA 151 Broadcast Performance 3 cr. hrs.
SCTA 160 TV Studio Production 3 cr. hrs.
SCTA 260 Electronic Field Production 3 cr. hrs.
SCTA 261 Electronic Media Copy Writing 3 cr. hrs.

Directed Electives 12 cr. hrs.
Choose one of the following: 3 cr. hrs.
SCTA 310 Media Literacy-A Weapon Against Propaganda
SCTA 353 Mass Media and Popular Culture
SCTA 340 Gender, Race, Ethnicity and Class in Media
Choose one of the following: 3 cr. hrs.
SCTA 360 Corporate Electronic Communication
SCTA 458 Broadcast Programming and Criticism
Choose one of the following: 3 cr. hrs.
SCTA 311 Persuasion
JOUR 345 History of Mass Communication
Choose one of the following: 3 cr. hrs.
SCTA 284 Sophomore Seminar
SCTA 200 Introduction to Film Studies
SCTA 248 Film-Cultures in Conflict
SCTA 301 History of Film

A research/writing course experience is required in the major or another field;
SCTA 284 Sophomore Seminar or another course approved by the department chair, will satisfy this requirement.

A senior portfolio experience is required in the major or another field;
SCTA 484, Senior Portfolio experience is required in the major or another field;
SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.
The Mathematics Department offers two options for mathematics majors, the liberal arts option and the education option. Both are based on a common core curriculum of 18 credit hours.

1. The liberal arts mathematics major is designed for students who desire a general education in mathematics as a background for graduate school or a career related to mathematics.

2. The education mathematics major is designed for prospective secondary school teachers. The curriculum provides the student with (1) specialized preparation in mathematics and (2) professional training required to obtain teacher certification.

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Mathematics Major - Liberal Arts: 37 Total Credits
Required Courses: 19 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 485 Seminar in Mathematics (writing intensive) 1 cr. hr.
Directed Electives: 18 cr. hrs.
Select at least six mathematics courses numbered higher than 300, excluding Math 436
Required Supporting Courses: 3 cr. hrs.
select one from
MATH 205 Mathematical Programming 3 cr. hrs.
or CPTS 162 Programming II or 3 cr. hrs.

Mathematics Major - Education
Professional Education Courses 34 cr. hrs.
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 212 Educational Psychology 5
TED 438 Techniques in Middle/Sec. Education: Mathematics 3 cr. hrs.
TED 420 School and Society 3 cr. hrs.
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
TED 423 Writing, Speaking and Listening in the Content Area 3 cr. hrs.
PSYC 330 Exceptional Child 3 cr. hrs.
TED 474 Student Teaching-Secondary only 12 cr. hrs.
or TED 473 & 474 Student Teaching-Middle/Secondary (6 cr. each)
or 12 cr. hrs.
Additional Courses for Middle School Certification 5 cr. hrs.
TED 414 Development of the Transescent 3 cr. hrs.
COUN 310 Counseling Skills for Teachers 2 cr. hrs.
Recommended for Middle School certification:
MATH 248 Elementary Mathematics from an Advanced Standpoint (3 cr. hrs.)

Major Requirements 36 Total Credits
Required Courses: 30 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 351 Abstract Algebra 3 cr. hrs.
MATH 356 Probability 3 cr. hrs.
MATH 411 Geometry 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
or MATH 357 Mathematical Statistics or 3 cr. hrs.
Directed Electives: 6 cr. hrs.
Select at least two mathematics courses numbered higher than 300, excluding MATH 371, 379 and 436
Required Supporting Courses: 5 cr. hrs.
MATH 436 History of Mathematics (writing intensive) 2 cr. hrs.
CPTS 460 Integrating Technology in Teaching Mathematics 3 cr. hrs.

Mathematics Minor - Liberal Arts: 24 Total Credits
Required Courses: 18 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
Directed Electives: 6 cr. hrs.
Select at least two mathematics courses numbered higher than 300, excluding MATH 436
Required Supporting Courses: 3 cr. hrs.
select one from
MATH 205 Mathematical Programming 3 cr. hrs.
CPTS 162 Programming II 3 cr. hrs.
PHYS 211 Scientific Programming 3 cr. hrs.

Mathematics Minor - Education: 24 Total Credits
Required Courses: 21 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
MATH 411 Geometry 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select one mathematics course numbered 266 or higher excluding MATH 279, 371, 379 and 436
Required Supporting Courses: 5 cr. hrs.
MATH 436 History of Mathematics 2 cr. hrs.
CPTS 460 Integrating Technology in Teaching Mathematics 3 cr. hrs.
Professional Courses (in addition to the major) 3 cr. hrs.
TED 438 Techniques in Middle/Sec. Education: Mathematics 3 cr. hrs.
Additional Courses for Middle School Certification 5 cr. hrs.
TED 414 Development of the Transescent 3 cr. hrs.
COUN 310 Counseling Skills for Teachers 2 cr. hrs.
Recommended for Middle School certification:
MATH 248 Elementary Mathematics from an Advanced Standpoint (3)

Mathematics Minor - For Elementary Education Majors
Minor Requirements 22-23 Total Credits
Required Courses: 16 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 216 Elementary Statistical Concepts 3 cr. hrs.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 248 Elementary Mathematics from an Advanced Standpoint 3 cr. hrs.
MATH 436 History of Mathematics 2 cr. hrs.
Directed Electives: 6-7 cr. hrs.
select two of the following
MATH 167 Calculus II 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 306 Number Theory 3 cr. hrs.
MATH 336 Combinatorics and Graph Theory 3 cr. hrs.
MATH 351 Abstract Algebra 3 cr. hrs.
MATH 356 Probability 3 cr. hrs.
CPTS 360 LOGO for Teachers 3 cr. hrs.
MATH 361 Symbolic Logic 3 cr. hrs.
MATH 411 Geometry 3 cr. hrs.

Mathematics Minor - Business or Social Science: 24 Total Credits
Required Courses: 18 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 236 Discrete Mathematics 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 226 Fundamental of Statistics 3 cr. hrs.
or MATH 326 Applied Statistics
Directed Electives: 6 cr. hrs.
Select two mathematics courses numbered 300 or higher, excluding MATH 326 and 436
UW-River Falls Certification for Middle School is available for elementary education majors and provides State of Wisconsin Certification in grades 1-9. In addition to the elementary education major requirements, this certification consists of four components:
1. Selection of a content area minor consistent with middle school curriculum.
2. TED 414 Development of the Transescent 3 cr. hrs.
3. COUN 310 Counseling Skills for Teachers 2 cr. hrs.
4. TED 473 Student Teaching (prerequisite TED 414)
An additional half semester (nine weeks) teaching experience in a middle school. Additional courses may be needed to meet DPI requirements.
Modern Language (MODL)
Department of Modern Language
College of Arts and Sciences

284 Kleinpell Fine Arts Building
(715) 425 3121

Margarita Hendrickson-Chair, Cecilia Bustamante, Kristine Butler, Monika Johansson, Peter Johansson, Terrence Mannetter, Lisa Myhre

The Modern Language Department offers a major in modern language with French, German and Spanish options. These programs lead to a B.A. or B.S. degree in liberal arts or a B.S. degree in secondary education. Minors are offered in French, German and Spanish. Two years of Chinese and Japanese are also available. Students who have studied a modern language in high school should take the Wisconsin Modern Language Placement Test, offered in spring Regional Testing and during all registration periods. Students may test out of up to fourteen credits. Test-out credits are not granted until the student completes the next level course with the grade of B or better.

BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Modern Language Major - Liberal Arts: 34 Total Credits
French Option-Liberal Arts
Required Courses: 31 cr. hrs.
FREN 102 Beginning French II 4 cr. hr.
FREN 201 Intermediate French I 3 cr. hrs.
FREN 202 Intermediate French II 3 cr. hrs.
FREN 301 Conversation and Composition I 3 cr. hrs.
FREN 302 Conversation and Composition II 3 cr. hrs.
FREN 341 French Civilization 3 cr. hrs.
FREN 342 Modern France and Francophone Cultures 3 cr. hrs.
FREN 351 Survey of French Literature to 1800 3 cr. hrs.
FREN 352 Survey of French Literature 1800 to present 3 cr. hrs.
FREN 401 Advanced French Communication 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select 3 cr. hrs.
FREN 451 French Prose Fiction 3 cr. hrs.
FREN 452 French Drama 3 cr. hrs.
FREN 453 French Poetry 3 cr. hrs.
FREN 490 Readings in French 1-3
MODL 379 Internship in Modern Language 2-3
French Option-Education
Required Courses: 31 cr. hrs.
FREN 102 Beginning French II 4 cr. hr.
FREN 201 Intermediate French I 3 cr. hrs.
FREN 202 Intermediate French II 3 cr. hrs.
FREN 301 Conversation and Composition I 3 cr. hrs.
FREN 302 Conversation and Composition II 3 cr. hrs.
FREN 341 French Civilization 3 cr. hrs.
FREN 342 Modern France and Francophone Cultures 3 cr. hrs.
FREN 351 Survey of French Literature to 1800 3 cr. hrs.
FREN 352 Survey of French Literature 1800 to present 3 cr. hrs.
FREN 401 Advanced French Communication 3 cr. hrs.
Required supporting courses not part of major: 5 cr. hrs.
FREN 350 French Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

German Option-Liberal Arts
Required Courses: 19 cr. hrs.
GERM 102 Beginning German II 4 cr. hr.
GERM 201 Intermediate German I 3 cr. hrs.
GERM 202 Intermediate German II 3 cr. hrs.
GERM 301 Conversation and Composition I 3 cr. hrs.
GERM 302 Conversation and Composition II 3 cr. hrs.
GERM 401 Advanced German Communication 3 cr. hrs.
Directed Electives: 15 cr. hrs. Select 12 credits from:
GERM 275 Business German 3 cr. hrs.
GERM 315 German Classic and Modern Film 3 cr. hrs.
GERM 341 German Civilization 3 cr. hrs.
GERM 342 Modern German-speaking Cultures 3 cr. hrs.
GERM 351 Survey of German Literature to Classicism 3 cr. hrs.
GERM 352 Survey of German Literature from Classicism to Present 3 cr. hrs.
Select 3 credits from:
GERM 451 German Drama and Theatre 3 cr. hrs.
GERM 452 German Tale, Short Story and Novella 3 cr. hrs.
GERM 453 German Poetry 3 cr. hrs.
GERM 490 Readings in German 1-3
MODL 379 Internship in Modern Language 2-3

German Option-Education Complete German major option program (must include 341 and/or 342)
Required supporting courses not part of major: 3 cr. hrs.
GERM 350 German Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

Spanish Option-Liberal Arts
Required Courses: 19 cr. hrs.
SPAN 102 Beginning Spanish II 4 cr. hr.
SPAN 201 Intermediate Spanish I 3 cr. hrs.
SPAN 202 Intermediate Spanish II 3 cr. hrs.
SPAN 301 Conversation and Composition I 3 cr. hrs.
SPAN 302 Conversation and Composition II 3 cr. hrs.
SPAN 401 Advanced Spanish Communication 3 cr. hrs.
Directed Electives: 15 cr. hrs.
Select 6 credits from:
SPAN 341 Spanish Civilization to 1800 3 cr. hrs.
SPAN 342 Spanish Civilization 1800 to Present 3 cr. hrs.
SPAN 345 Latin American Civilization to 1800 3 cr. hrs.
SPAN 345 Latin American Civilization 1800 to Present 3 cr. hrs.
MODL 376 Mexico: A Cultural Experience 3 cr. hrs.
Select 6 credits from:
SPAN 351 Survey of Spanish Literature-Siglo de Oro 3 cr. hrs.
SPAN 352 Survey of Spanish Literature-Generation of 1898 to Present 3 cr. hrs.
SPAN 355 Survey of Latin American Literature-Conquest to Independence 3 cr. hrs.
SPAN 356 Survey of Latin American Literature-Independence to Present 3 cr. hrs.
Select 3 credits from:
SPAN 452 Advanced Spanish Literature 3 cr. hrs.
SPAN 455 Advanced Latin American Literature 3 cr. hrs.
SPAN 490 Readings in Spanish 1-3
MODL 379 Internship in Modern Language 2-3
Spanish Option-Education
Complete Spanish Major Liberal Arts Option program above
Required supporting courses not part of major: 5 cr. hrs.
SPAN 350 Spanish Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

French Minor: 22 Total Credits
French Minor-Liberal Arts Required Courses: 19 cr. hrs.
FREN 102 Beginning French II 4 cr. hr.
FREN 201 Intermediate French I 3 cr. hrs.
FREN 202 Intermediate French II 3 cr. hrs.
FREN 301 Conversation and Composition I 3 cr. hrs.
FREN 302 Conversation and Composition II 3 cr. hrs.
FREN 401 Advanced French Communication 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select 3 cr. hrs credits from:
FREN 341 French Civilization 3 cr. hrs.
FREN 342 Modern French and Francophone Cultures 3 cr. hrs.
FREN 351 Survey of French Literature to 1800 3 cr. hrs.
FREN 352 Survey of French Literature 1800 to Present 3 cr. hrs.
MODL 379 Internship in Modern Language 2-3 cr. hrs.
French Minor-Education
Complete French Minor Liberal Arts program
(must include 341 or 342)
Required courses not part of minor: 5 cr. hrs.
FREN 350 French Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

German Minor: 22 Total Credits
German Minor-Liberal Arts
Required Courses: 19 cr. hrs.
GERM 102 Beginning German II 4 cr. hr.
GERM 201 Intermediate German I 3 cr. hrs.
GERM 202 Intermediate German II 3 cr. hrs.
GERM 301 Conversation and Composition I 3 cr. hrs.
GERM 302 Conversation and Composition II 3 cr. hrs.
GERM 401 Advanced German Communication 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select 3 cr. hrs credits from:
GERM 275 Business German 3 cr. hrs.
GERM 315 German Classic and Modern Film 3 cr. hrs.
GERM 341 German Civilization 3 cr. hrs.
GERM 342 Modern German-speaking Cultures 3 cr. hrs.
GERM 351 Survey of German Literature to Classicism 3 cr. hrs.
GERM 352 Survey of German Literature from Classicism to Present 3 cr. hrs.
MODL 379 Internship in Modern Language 2-3 cr. hrs.
German Minor-Education
Complete German minor program
(must include 341 or 342)
Required supporting courses not part of minor: 5 cr. hrs.
GERM 350 German Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.

Spanish Minor: 22 Total Credits
Spanish Minor-Liberal Arts
Required Courses: 19 cr. hrs.
SPAN 102 Beginning Spanish II 4 cr. hr.
SPAN 201 Intermediate Spanish I 3 cr. hrs.
SPAN 202 Intermediate Spanish II 3 cr. hrs.
SPAN 301 Conversation and Composition I 3 cr. hrs.
SPAN 302 Conversation and Composition II 3 cr. hrs.
Directed Electives: 3 cr. hrs.
Select 3 cr. hrs from:
SPAN 341 Spanish Civilization to 1800 3 cr. hrs.
SPAN 342 Spanish Civilization 1800 to Present 3 cr. hrs.
SPAN 345 Latin American Civilization to 1800 3 cr. hrs.
SPAN 345 Latin American Civilization 1800 to Present 3 cr. hrs.
SPAN 351 Survey of Spanish Literature-Siglo de Oro 3 cr. hrs.
SPAN 352 Survey of Spanish Literature-Generation of 1898 to present 3 cr. hrs.
SPAN 355 Survey of Latin American Literature-Conquest to independence 3 cr. hrs.
SPAN 356 Survey of Latin American Literature-Independence to present 3 cr. hrs.
MODL 376 Mexico: A Cultural Experience 3 cr. hrs.
MODL 379 Internship in Modern Language 2-3 cr. hrs.
SPAN 401 Advanced Spanish Communication 3 cr. hrs.

Spanish Minor-Education
Complete Spanish Minor Liberal Arts program
(must include 401 and 341, 342, 345, 346 or 376)
Required supporting courses not part of minor: 5 cr. hrs.
SPAN 350 Spanish Phonetics 2 cr. hrs.
TED 437 Techniques of Middle/Secondary Education: Modern Language 3 cr. hrs.
The Department of Music offers majors leading to the degrees of Bachelor of Music Education (B.M.E.), Bachelor of Arts (B.A.) or Bachelor of Science (B.S.). In the B.M.E. degree program, students may elect either a Choral/General Music (K-12) emphasis (includes a piano-vocal option) or an Instrumental/General Music (K-12) emphasis. Choices in the B.A. or B.S. degrees include majors in either Liberal Arts or Music-Broad Area. The Music Education and Music-Broad Area majors require no minor. The Liberal Arts major requires a minor or double major. The B.M.E. degree is designed to train and certify public school music teachers, whereas, the B.A. and B.S. degrees do not provide teacher certification but are designed for those students seeking admittance to a professional graduate school or another music related career.

The department also offers a Music Minor (non-teaching) and a Musical Theatre Minor. All applicants for admission to degree programs in music must satisfactorily complete a performance audition. Audition requirements for all performance areas are available from the Music Department. In addition to the performance audition, all transfer applicants must take a music theory and history placement exam. The results of the exam will determine the appropriate course levels. Music students should consult the department handbook, which clarifies course requirements and provides additional pertinent information.

The University of Wisconsin-River Falls is an accredited institutional member of the National Association of Schools of Music.

BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Music Education Major
Major Requirements 69 Total Credits
Requirements: 36 cr. hrs.
MUS 130 Music Theory and Ear Training I 4 cr. hr.
MUS 131 Music Theory and Ear Training II 4 cr. hr.
MUS 230 Music Theory and Ear Training III 4 cr. hr.
MUS 231 Music Theory and Ear Training IV 4 cr. hr.
MUS 234 Music History and Literature I (writing intensive) 4 cr. hr.
MUS 235 Music History and Literature II (writing intensive) 4 cr. hr.
MUS 240 Piano Proficiency - Examination: MUS 140 (Class Piano) 0 must be taken until 240 is passed; 140 and 240 credits are not counted toward music major.
MUS 333 20th Century Music 3 cr. hrs.
MUS 351 Music Education I 3 cr. hrs.
MUS 352 Music Education II 3 cr. hrs.
MUS 491 Senior Recital 0
MUS 200+ Any Music Course 200 and above 3 cr. hrs.
Pianists must take MUS 440: Piano Pedagogy
Required Courses for Choral/General Certification: 33 cr. hrs.
MUSA 127 Applied Voice—Pianists may substitute 3 cr. of Applied Piano 125 (2 per semester) 8
MUSA 327 Applied Voice (upper level)—Pianists may substitute 3 cr. hrs. of Applied Piano 325 (2 per semester) 6
MUSE 108 Concert Choir (required each semester)
MUS 102 Class Guitar 1 cr. hr.
MUS 247 Diction I: IPA and Italian 1 cr. hr.
MUS 248 Diction II: German and French 1 cr. hr.
MUS 341 Vocal and Choral Pedagogy 3 cr. hrs.
MUS 342 Conducting 2 cr. hrs.
MUS 344 Choral Conducting 2 cr. hrs.
MUS 331 Choral Composition and Arranging 3 cr. hrs.
MUS 433 Choral Literature 3 cr. hrs.
MUS 340 Opera Techniques 3 cr. hrs.

Required Courses for Instrumental/General Certification: 33 cr. hrs.
MUSA 100 level Applied—credits must be in the same area (2 per semester) 8
MUSA 300 level Applied—upper level—credits must be in the same area (2 per semester) 6
MUSE 111 University-Community Orchestra
or MUSE 113 Wind Ensemble (large ensemble required each semester)
MUS 102 Class Guitar 1 cr. hr.
MUS 103 Class Voice 1 cr. hr.
MUS 141 String Techniques 1 cr. hr.
MUS 241 Woodwind Techniques I 1 cr. hr.
MUS 242 Woodwind Techniques II 1 cr. hr.
MUS 243 Brass Techniques I 1 cr. hr.
MUS 244 Brass Techniques II 1 cr. hr.
MUS 245 Percussion Techniques I 1 cr. hr.
MUS 246 Percussion Techniques II 1 cr. hr.
MUS 342 Conducting 2 cr. hrs.
MUS 343 Instrumental Conducting 2 cr. hrs.
MUS 330 Orchestration 3 cr. hrs.
MUS 431 Instrumental Literature 3 cr. hrs.

Required for Teacher Certification: 28 cr. hrs. (not counted in major total)
Choral/General or Instrumental/General (courses to be taken in the College of Education)
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 212 Educational Psychology: Middle and Secondary Education 5 cr. hrs.
TED 420 School and Society 3 cr. hrs.
TED 422 Content Area Literacy 3 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.
TED 475 Student Teaching 12 cr. hrs.

Music Major - Liberal Arts (minor required): 46 Total Credits
Requirements: 35 cr. hrs.
MUS 130 Music Theory and Ear Training I 4 cr. hr.
MUS 131 Music Theory and Ear Training II 4 cr. hr.
MUS 230 Music Theory and Ear Training III 4 cr. hr.
MUS 231 Music Theory and Ear Training IV 4 cr. hr.
MUS 234 Music History and Literature I (writing intensive) 4 cr. hr.
MUS 235 Music History and Literature II (writing intensive) 4 cr. hr.
MUS 333 20th Century Music 3 cr. hrs.
MUSA 100 level Applied Music-credits must be in the same area. 4 cr. hr.
MUSE Music Ensembles 4 cr. hr.
Directed Electives: 11 cr. hrs.
MUSA or MUSE Performance credits (Applied Music or Ensembles) 4 - 6 cr. hrs.
Music Pedagogy, Techniques Course(s) or Academic Music course 200 level and above 4 - 6 cr. hrs.

Music-Broad Area Major: 64 Total Credits
Requirements: 36 cr. hrs.
MUS 130 Music Theory and Ear Training I 4 cr. hrs.
MUS 131 Music Theory and Ear Training II 4 cr. hrs.
MUS 230 Music Theory and Ear Training III 4 cr. hrs.
MUS 231 Music Theory and Ear Training IV 4 cr. hrs.
MUS 234 Music History and Literature I (writing intensive) 4 cr. hrs.
MUS 235 Music History and Literature II (writing intensive) 4 cr. hrs.
MUS 240 Piano Proficiency - Examination: MUS 140 (Class Piano) 0 must be taken until 240 is passed; 140 and 240 credits are not counted toward music major.
MUS 333 20th Century Music 3 cr. hrs.
MUSA 100 level Applied credits must be in the same area (2 per semester) 8 cr. hrs.
MUSA 300 level Applied-upper level credits must be in the same area (2 per semester) 8 cr. hrs.
MUSE 108 Concert Choir (1 cr.)
or MUSE 111 University-Community Orchestra (1 cr.)
or MUSE 113 Symphonic Band (1 cr.) to total 4 cr. hr.
MUSE Any Ensemble to total 4 cr. hr.
MUS 491 Senior Recital 1 cr. hr.
MUS 330 Orchestration
or MUS 331 Choral Composition and Arranging 3 cr. hrs.
MUS 200 + Any Music Courses 200 level and above 3 cr. hrs.
MUS 200 + Any Music Courses 200 level and above 3 cr. hrs.
MUS 200 + Any Music Courses 200 level and above 3 cr. hrs.

Music Minor: 24 Total Credits
Required Courses: 16 cr. hrs.
MUS 130 Music Theory and Ear Training I 4 cr. hr.
MUS 131 Music Theory and Ear Training II 4 cr. hr.
MUS 234 Music History and Literature I (writing intensive) (can be double counted in Gen. Ed.) 4 cr. hr.
MUS 235 Music History and Literature II (writing intensive) 4 cr. hr.
Directed Electives: 8 cr. hrs.
MUS Choose from the areas of music history, music theory, jazz, composition, piano pedagogy, or applied.

Musical Theatre
Interdisciplinary

The minor in Musical Theatre, offered as a collaborative effort between the departments of Speech Communication and Theatre Arts, Music, and Health and Human Performance (dance), is designed to provide students an opportunity to gain formal training. It includes courses in music theory and performance, dance styles, and stage movement, as well as additional courses in theatrical performance, production, and design, with special consideration to their application in creation of
and performance in musical production. This minor is available to all students, including music and speech (theatre emphasis) majors and minors.

Musical Theatre Minor: 24 Total Credits
Required Courses: 18 cr. hrs.
MUS 103 Class Voice 1 cr. hr.
MUS 130 Music Theory and Ear Training I 4 cr. hr.
MUS 131 Music Theory and Ear Training II 4 cr. hr.
MUS 225 Voice for the Actor 1 cr. hr.
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.
SCTA 225 Musical Theatre Performance 3 cr. hrs.
SCTA 375 Theatre Practicum: Production 1 cr. hr.
SCTA 376 Theatre Practicum: Design and Technology 1 cr. hr.
Directed Electives: 2 cr. hrs.
(select from the following)
DANC 107 Social Dance .5
DANC 110 Basic Jazz Dance .5
DANC 120 Fundamentals of Movement through Dance 1 cr. hr.
DANC 150 Dance Improvisation 1 cr. hr.
DANC 224 Ballet I 1 cr. hr.
Electives: 4 cr. hrs.
(select from the following)
DANC 107 Social Dance .5
DANC 110 Basic Jazz Dance .5
DANC 224 Ballet I 1 cr. hr.
DANC 260 Dance Repertory 1-3
SCTA 131 Design for the Theatre 3 cr. hrs.
A maximum of 3 credits from the following 3 courses may be applied toward electives:
SCTA 231 Stage Technology and Scene Painting
SCTA 332 Stage Costuming
SCTA 333 Stage Lighting
SCTA 221 Acting II: Characterization 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 288 Career Development: Theatre Arts 1 cr. hr.
SCTA 339 American Theatre 3 cr. hrs.
MUSA 127 Applied Voice (a maximum of 2 cr. hrs. may be applied toward electives) 1 cr. hr.
MUS 230 Music Theory and Ear Training III 4 cr. hr.
MUS 340 Opera Techniques 3 cr. hrs.
Students majoring in Music or Speech (any emphasis) may not double count any course when completing the Music Theatre Minor.
Speech Communication and Theatre Arts and Music majors should consult with an advisor and substitute other electives (from the list above) for those required in both their major and minor.
Musical Theatre
Interdisciplinary

The minor in Musical Theatre, offered as a collaborative effort between the departments of Speech Communication and Theatre Arts, Music, and Health and Human Performance (dance), is designed to provide students an opportunity to gain formal training. It includes courses in music theory and performance, dance styles, and stage movement, as well as additional courses in theatrical performance, production, and design, with special consideration to their application in creation of and performance in musical production. This minor is available to all students, including music and speech (theatre emphasis) majors and minors.

Musical Theatre Minor: 24 Total Credits
Required Courses: 18 cr. hrs.
MUS 103 Class Voice 1 cr. hr.
MUS 130 Music Theory and Ear Training I 4 cr. hr.
MUS 131 Music Theory and Ear Training II 4 cr. hr.
MUS 225 Voice for the Actor 1 cr. hr.
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.
SCTA 225 Musical Theatre Performance 3 cr. hrs.
SCTA 375 Theatre Practicum: Production 1 cr. hr.
SCTA 376 Theatre Practicum: Design and Technology 1 cr. hr.

Directed Electives: 2 cr. hrs.
(select from the following)
DANC 107 Social Dance .5
DANC 110 Basic Jazz Dance .5
DANC 120 Fundamentals of Movement through Dance 1 cr. hr.
DANC 150 Dance Improvisation 1 cr. hr.
DANC 224 Ballet I 1 cr. hr.

Electives: 4 cr. hrs.
(select from the following)
DANC 107 Social Dance .5
DANC 110 Basic Jazz Dance .5
DANC 224 Ballet I 1 cr. hr.
DANC 260 Dance Repertory 1-3
SCTA 131 Design for the Theatre 3 cr. hrs.

A maximum of 3 credits from the following 3 courses may be applied toward electives:
SCTA 231 Stage Technology and Scene Painting
SCTA 332 Stage Costuming
SCTA 333 Stage Lighting
SCTA 221 Acting II: Characterization 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 288 Career Development: Theatre Arts 1 cr. hr.
SCTA 339 American Theatre 3 cr. hrs.
MUSA 127 Applied Voice (a maximum of 2 cr. hrs. may be applied toward electives) 1 cr. hr.
MUS 230 Music Theory and Ear Training III 4 cr. hr.
MUS 340 Opera Techniques 3 cr. hrs.

Students majoring in Music or Speech (any emphasis) may not double count any course when completing the Music Theatre Minor.

Speech Communication and Theatre Arts and Music majors should consult with an advisor and substitute other electives (from the list above) for those required in both their major and minor.
Outdoor Education
Department of Health and Human Performance
College of Education and Professional Studies

111 Karges Center Phone Number
(715) 425-3705
Web Site http://www.uwrf.edu/hhp/

Chair-Connie Foster, Debra Allyn, Betsy Barrett, Richard Bowen, Kevin Bullis, Gary Eloranta, Patti Ford, Steve Freeman, Tom Journell, Douglas Naylor, John O'Grady, Faye Perkins, Robert Ritzer, Susan Tarr, Jim Theis, Karla Zhe

Outdoor Education Minor: 24 Total Credits
Required Courses: 13-16 cr. hrs.
PED 201 Outdoor Education Concepts and Skills-Summer 3 cr. hrs.
PED 202 Outdoor Education Concepts and Skills-Winter 3 cr. hrs.
PED 371 Recreation Field Study 1-4 cr. hrs.
PED/ESM 301 Foundation of Outdoor Leadership 3 cr. hrs.
SFED 200 First Aid and Basic Life Support 3 cr. hrs.
Electives 8-11 cr. hrs.
ESM 300 Environmental Education 3 cr. hrs.
or GEOG 300 Environmental Education
ESM 307 Multicultural Perspectives in the Environment 3 cr. hrs.
ESM 365 Interpretive Services 3 cr. hrs.
GEOL 269 Environmental Geology 2 cr. hrs.
PED 109 Recreational Climbing 1 cr. hr.
PED 118 Scuba .5 cr. hr.
PED 128 Fundamentals of Ice Skating .5 cr. hr.
PED 145 Lifeguard Training 2 cr. hrs.
PED 147 Water Safety Instructor 2 cr. hrs.
PED 255 Techniques in Sport Fishing 1 cr. hr.
PED 300 Adapted Physical Education 2 cr. hrs.
PED 389 Special Topics in Physical Education 3-5 cr. hrs.
PED 450 Organization and Administration of Physical Education and Athletics 2 cr. hrs.
POLS 355 Environmental Law 3 cr. hrs.
SOCI 230 Sociology of Sport and Leisure 3 cr. hrs.
TED 312 Techniques in Elementary Education: Science 4 cr. hr.
Philosophical inquiry aims at uncovering, analyzing, and evaluating the fundamental values and assumptions implicit in various human activities and practices such as science, the arts, religion, morality, and social and political institutions. Its ultimate goal is to develop a coherent view of the world and our place in it. Philosophy focuses on sharpening the ability to analyze, reason, and write effectively.

Philosophy Minor: 24 Total Credits
Required Courses: 9 cr. hrs.
PHIL 221 Ancient Philosophy 3 cr. hrs.
PHIL 223 Origins of Modern Philosophy 3 cr. hrs.
PHIL 230 Logical Reasoning 3 cr. hrs.
Directed Electives: 15 cr. hrs.
Five additional PHIL courses
Physics (PHYS)
Department of Physics
College of Arts and Sciences

125 Centennial Science Hall
(715) 425-3235

James Madsen-Chair, Earl Blodgett, Eileen Korenic, Lowell McCann, Glenn Spiczak, Ronald Wilson

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Physics Major-Liberal Arts
Core Requirements: 25 cr. hrs.
The prerequisite courses for all courses required in the physics major must be passed with a grade of C or better
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 204 Intermediate Physics Laboratory 1 cr. hr.
PHYS 161 General Physics I 4 cr. hrs.
PHYS 162 General Physics II 4 cr. hrs.
PHYS 264 General Physics III 4 cr. hrs.
PHYS 301 Advanced Physics Laboratory I (writing intensive) 3 cr. hrs. PHYS 302 Advanced Physics Laboratory II (writing intensive) 3 cr. hrs.
PHYS 311 Electronics: Circuits and Devices 3 cr. hrs.
PHYS 485 Seminar (writing intensive) 1 cr. hr.
Required Supporting Courses: 20 cr. hrs.
MATH 166 Calculus I 4 cr. hrs.
MATH 167 Calculus II 4 cr. hrs.
MATH 331 Differential Equations 3 cr. hrs.
PHYS 211 Scientific Programming 3 cr. hrs.
or CPTS 162 Programming II or 3 cr. hrs.
PHYS 361 Mathematics of Physics and Engineering I 3 cr. hrs.
PHYS 362 Mathematics of Physics and Engineering II 3 cr. hrs.
Option I 50 Total Credits
Recommended as preparation for graduate studies in physics or for industrial research.
Physics Major Core 25 cr. hrs.
Directed Electives in Physics-Choose from courses below: 25 cr. hrs.
Option II 36 Total Credits
Recommended for students wanting maximum flexibility for study in other areas

Physics Major-Secondary Education
Physics Major Core 25 cr. hrs.
Directed Electives in Physics-Choose from courses below: 11 cr. hrs.
Directed Electives in Physics
PHYS 279 Cooperative Education and Internship 1 cr. hr.
PHYS 312 Electronics: Linear Integrated Circuits 3 cr. hrs.
or PHYS 313 Electronics: Digital Circuit Theory and Applications
PHYS 318 Astrophysics 3 cr. hrs.
PHYS 321 Physical Acoustics I 2 cr. hrs.
PHYS 322 Physical Acoustics II 2 cr. hrs.
PHYS 379 Cooperative Education and Internship 3 cr. hrs.
PHYS 415 Thermodynamics 3 cr. hrs.
PHYS 420 Optics 4 cr. hr.
PHYS 426 Nuclear and Particle Physics 4 cr. hr.
PHYS 427 Condensed Matter Physics 4 cr. hr.
PHYS 441 Classical Mechanics 4 cr. hr.
PHYS 442 Electricity and Magnetism 4 cr. hr.
PHYS 465 Quantum Mechanics 3 cr. hrs.

Applied Option 50 Total Credits
Recommended as preparation for a career in an industrial or government laboratory, or for
graduate study in Applied Physics, Electronics, Engineering Physics, and Geophysics.
Core Requirements 25 cr. hrs.
Directed Electives in Physics 25 cr. hrs.
PHYS 250 Statics 3 cr. hrs.
PHYS 252 Dynamics 3 cr. hrs.
PHYS 254 Deformable Body Mechanics 3 cr. hrs.
PHYS 312 Electronics: Linear Integrated Circuits 3 cr. hrs.
PHYS 313 Electronics: Digital Circuit Theory and Applications 3 cr. hrs.
PHYS 361 Mathematics of Physics and Engineering I 3 cr. hrs.
PHYS 362 Mathematics of Physics and Engineering II 3 cr. hrs.
Choose an internship and/or advanced courses of an applied nature elected 4 from Physics,
Chemistry, or Geology.

Physics Major - Dual Degree
Major Requirements 36 Total Credits
Core Requirements: 25 cr. hrs.
PHYS 331 Curriculum Physics 3 cr. hrs.
Directed Electives in Physics 8 cr. hrs.
As listed for Liberal Arts excluding PHYS 279 and 379 Internship courses This major is awarded
jointly with a B.S. in engineering after the student has successfully completed a three-year
program at UW-River Falls with a minimum grade point average of 3.0 and a two-year program at
either UW-Madison or the University of Minnesota.
Required Courses in Physics at UW-River Falls: 10 cr. hrs.
PHYS 101 General Physics Laboratory I (meets Gen Ed req) 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I (meets Gen Ed req) 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
Required Supporting Courses: 30 cr. hrs.
MATH 166 Calculus I (meets Gen Ed req) 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 331 Differential Equations
PHYS 211 Scientific Programming 3 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
Directed Electives: 20 cr. hrs.
PHYS 250 Statics 3 cr. hrs.
PHYS 252 Dynamics 3 cr. hrs.
PHYS 254 Deformable Body Mechanics 3 cr. hrs.
PHYS 264 General Physics III 4 cr. hr.
PHYS 301 Advanced Physics Laboratory I 3 cr. hrs.
PHYS 311 Electronics: Circuits and Devices 3 cr. hrs.
PHYS 361 Mathematics of Physics and Engineering I 3 cr. hrs.
PHYS 362 Mathematics of Physics and Engineering II 3 cr. hrs.
MATH 326 Applied Statistics 3 cr. hrs.
MATH 346 Numerical Analysis I 3 cr. hrs.
Credits Transferred from Engineering School 20 cr. hrs.

Minor in Physics - Liberal Arts or Education: 24 Total Credits
Required Courses 14 cr. hrs.
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 264 General Physics III 4 cr. hr.
Required Supporting Courses: 11 cr. hrs.
(may be taken under Gen Ed or under Major)
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
PHYS 361 Mathematics of Physics and Engineering I 3 cr. hrs.
or MATH 266 Calculus III
Directed Electives for Both Minors: 10 cr. hrs.
PHYS 204 Intermediate Physics Laboratory (writing intensive) 1 cr. hr.
PHYS 301 Advanced Physics Laboratory I (writing intensive) 3 cr. hrs.
PHYS 302 Advanced Physics Laboratory II (writing intensive) 3 cr. hrs.
PHYS 311 Electronics: Circuits and Devices 3 cr. hrs.
PHYS 312 Electronics: Linear Integrated Circuits 3 cr. hrs.
or PHYS 313 Electronics: Digital Circuit Theory and Applications
PHYS 318 Astrophysics 3 cr. hrs.
PHYS 321 Physical Acoustics I 2 cr. hrs.
PHYS 322 Physical Acoustics II 2 cr. hrs.
PHYS 415 Thermodynamics 3 cr. hrs.
PHYS 420 Optics 4 cr. hr.
PHYS 426 Nuclear and Particle Physics 4 cr. hr.
PHYS 427 Condensed Matter Physics 4 cr. hr.
PHYS 441 Classical Mechanics 4 cr. hr.
PHYS 442 Electricity and Magnetism 4 cr. hr.
PHYS 465 Quantum Mechanics 3 cr. hrs.
Additional Choice for Directed Elective for Secondary Education Minor PHYS 331 Curriculum Physics 3 cr. hrs.

Pre-Engineering: 68 Total Credits
Required Courses: 55 cr. hrs.
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 211 Scientific Programming 3 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
MATH 256 Linear Algebra 3 cr. hrs.
MATH 266 Calculus III 3 cr. hrs.
MATH 331 Differential Equations 3 cr. hrs.
ENGL 111 Freshman English I 3 cr. hrs.
ENGL 112 Freshman English II 3 cr. hrs.
ECON 201 Principles of Microeconomics 3 cr. hrs.
ECON 202 Principles of Macroeconomics 3 cr. hrs.
SCTA 101 Fundamentals of Oral Communication 3 cr. hrs.
Electives depending on final engineering major: 13 cr. hrs.
select from MATH, PHYS, CPTS, CHEM, GENG, BIOL, GEOL
The Political Science Department's requirements for a major or minor in liberal arts and in education are designed to expose students to the breadth of subject matter contained in the discipline of political science. The department has also outlined programs of study designed to prepare students for careers in the public sector, including foreign service, federal, state and local government. Information for students interested in pre-law is listed on page 40. Program recommendations focusing on public sector employment and foreign service are available from the department. Broad Field Social Studies Major: Political Science is one of the subject fields comprising the Broad Field Social Studies major. For information about this major, see page 163. Social Science Minor: Political Science is one of the subject fields comprising the minor in Social Science. For information about this minor, see page 162.

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Political Science Major: 36 Total Credits
Required Courses: 9 cr. hrs.
POLS 114 American National, State and Local Government 3 cr. hrs.
POLS 200 Political Analysis 3 cr. hrs.
POLS 480 Seminar in Political Science (writing intensive) 3 cr. hrs.
Directed Electives: 15 cr. hrs.
Select one course in each of the following five fields.
1. American Politics 3 cr. hrs.
POLS 225 Introduction to Public Administration
POLS 256 Public Policymaking Political Institutions
POLS 311 American Political Parties and Elections
POLS 326 The American Presidency: The Office and its Powers
POLS 327 Congressional Politics State/Local Government
POLS 253 State and Local Politics
POLS 322 Politics of American Cities
2. International Relations 3 cr. hrs.
POLS 260 Introduction to International Relations
3. Comparative Politics 3 cr. hrs.
POLS 245 Introduction to Comparative Politics
4. Political Philosophy
POLS 230 Contemporary Political Ideologies 3 cr. hrs.
POLS 308 Western Political Thought: The Renaissance to Marx
POLS 309 Western Political Thought: Nietzsche to the 20th Century
POLS 310 History of American Political Thought
5. Political Behavior 3 cr. hrs.
POLS 212 The Politics of Equality and Inequality in the United States POLS 314 Women and
Politics
POLS 320 Journalism and Public Opinion
POLS 321 Political Participation
Electives: 12 cr. hrs.
Any POLS course, excluding courses taken to fulfill required or directed electives.
Restrictions: Students may apply a maximum of 6 credits of POLS 379"Internship in Political Science toward the elective section of the major. Students majoring in Political Science must take a minimum of 15 out of the total 36 credits for the major in courses numbered at the 300 level or above, excluding credits taken for POLS 379 Internship in Political Science.

Political Science Minor: 24 Total Credits
Required Courses: 3 cr. hrs.
POLS 114 American National, State and Local Government 3 cr. hrs.
Directed Electives: 12 cr. hrs.
Select one course from four of the following five fields:
1. American Politics 3 cr. hrs
POLS 225 Introduction to Public Administration
POLS 256 Public Policymaking Political Institutions
POLS 311 American Political Parties and Elections
POLS 320 The American Presidency: The Office and its Powers
POLS 327 Congressional Politics State/Local Government
POLS 253 State and Local Politics
POLS 322 Politics of American Cities
2. International Relations 3 cr. hrs.
POLS 260 Introduction to International Relations
3. Comparative Politics
POLS 245 Introduction to Comparative Politics 3 cr. hrs.
4. Political Philosophy
POLS 230 Contemporary Political Ideologies 3 cr. hrs.
POLS 308 Western Political Thought: The Renaissance to Marx
POLS 309 Western Political Thought: Nietzsche to the 20th Century
POLS 310 History of American Political Thought
5. Political Behavior 3 cr. hrs.
POLS 212 The Politics of Equality and Inequality
POLS 314 Women and Politics
POLS 320 Journalism and Public Opinion
POLS 321 Political Participation
Electives: 9 cr. hrs.
Any POLS course, excluding any courses taken to fulfill required or directed electives Restrictions: Students may apply a maximum of 3 cr. hrs of credits of POLS 379 Internship in Political Science toward the elective section of the minor. Students minor in Political Science must take a minimum of 9 out of the total 24 credits for the minor in courses numbered at the 300 level or above, excluding credits taken for POLS 379 Internship in Political Science.

Broad Field Social Studies Major
For those who wish to teach political science in high school, the required major is the Broad Field Social Studies Major-Political Science Emphasis, see page 163.
Professional and Organizational Communication
Department of Speech Communication and Theatre Arts
College of Arts and Sciences

B-24 Kleinpell Fine Arts Building
(715) 425-3971

Margaret M. Swanson-Chair, Suzanne Hagen, Robin Murray, James Pratt, Ronald Snell, Kenneth
Stofferahn, Richard Vogel, Barbara L. Werner, James Zimmerman

Professional and Organizational Communication Minor: 25-28 Total Credits
Required Courses 16-19 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 216 Communication in the Interview 3 cr. hrs.
SCTA 316 Organizational Communication 3 cr. hrs.
Choose any combination from the following two to total 3 credits:
SCTA 379 Internship in SCTA 3-4 cr. hr.
SCTA 499 Independent Study/Independent Research 1-3
Directed Electives 9 cr. hrs.
SCTA 106 Interpersonal Communication 3 cr. hrs.
SCTA 111 Argumentation and Decision Making 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SCTA 318 Communication and Leadership 3 cr. hrs.
SCTA 360 Corporate Electronic Communication 3 cr. hrs.
SCTA 416 Communication Training and Development in Organizations 3 cr. hrs.
SCTA 440 Gender Communication 3 cr. hrs.
A research/writing course experience is required in the major or another field; SCTA 284§
Sophomore Seminar or another course approved by the department chair, will satisfy this
requirement.
A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio
experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another
course approved by the department chair, will satisfy this requirement.
The Professional Writing Minor Business-Government option provides study and practice in the spectrum of communication from graphic design to computer literacy and emphasizes training useful in business, industry, and government. The minor is not recommended for English Education majors. Students selecting this minor are advised to complete an English internship, ENGL 379.

The Professional Writing Minor Creative Writing option serves as a foundation for general publication or in-house publication in large businesses and also for "professional writing" in its traditional sense: "free-lance" writing as a primary or supplemental source of income or as an avocation. The minor is not recommended for English Education majors. Students selecting this minor are advised to complete an English internship, ENGL 379.

Professional Writing Business Government Option 23-24 Total Credits
Required Courses: 5-9 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 266 Business Writing 3 cr. hrs.
ENGL 367 Technical Writing 3 cr. hrs.
English Majors may not double count ENGL 251, but must take an additional appropriate course selected from ENGL 361, 370, 373, JOUR 241, 245, 269, 360, 363, or SCTA 334.

Directed electives: 14-15 cr. hrs.
A. Select two: 5-6 cr. hrs.
ART 225 Advertising Design I 3 cr. hrs.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 303 Advertising Design II 3 cr. hrs.
ART 335 Studio - Photography 3 cr. hrs.
JOUR 260 Introduction to Public Relations 2 cr. hrs.
JOUR 265 Beginning Photography 3 cr. hrs.
JOUR 266 Photojournalism 3 cr. hrs.
JOUR 269 Feature Writing for Magazines and Newspapers 2 cr. hrs.
JOUR 320 Journalism and Public Opinion 3 cr. hrs.
JOUR 360 Opinion Writing 3 cr. hrs.
JOUR 362 Advertising Principles 2 cr. hrs.
CPTS 105 Microcomputer Applications 2 cr. hrs.
ENGL 379 Internship 2-3

Only one of the beginning photography courses, JOUR 265 or ART 235, may be taken for credit.

B. Select two: 6 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 370 Writing Nonfiction 3 cr. hrs.
ENGL 372 Practicum: Peer Tutoring and Writing Instruction 3 cr. hrs.
SCTA 116 Business and Professional Communication 3 cr. hrs.
SCTA 211 Public Speaking 3 cr. hrs.
SCTA 216 Communication in the Interview 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
SCTA 316 Organizational Comm 3 cr. hrs.
C. Select one additional course from any of the above. 3 cr. hrs.

Professional Writing-Creative Writing Option 24 Total Credits
Required Courses: 9 cr. hrs.
ENGL 251 Advanced Composition 3 cr. hrs.
ENGL 253 Introduction to Literary Studies 3 cr. hrs.
ENGL 262 Creative Writing 3 cr. hrs.
English Majors may not double count ENGL 251, but must take an additional appropriate course selected from ENGL 361, 370, 373, JOUR 241, 245, 269, 360, 363, or SCTA 334; for ENGL 253, select another genre course. Directed electives: 15 cr. hrs.
A. Select two: 6 cr. hrs.
ENGL 368 Writing Poetry 3 cr. hrs.
ENGL 369 Writing Fiction 3 cr. hrs.
ENGL 370 Writing Nonfiction 3 cr. hrs.
ENGL 482 Writing Seminar in Fiction and Poetry 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
B. Select one genre course: 3 cr. hrs.
ENGL 231 The Short Story 3 cr. hrs.
ENGL 232 Contemporary Drama 3 cr. hrs.
ENGL 233 Introduction to Poetry 3 cr. hrs.
ENGL 234 Modern Novels 3 cr. hrs.
ENGL 250 Children's Literature 3 cr. hrs.
ENGL 355 Literature for Adolescents 3 cr. hrs.
C. Select two:
Only one of the beginning photography courses, 6 cr. hrs. JOUR 265 and ART 235, may be taken for credit.
ART 235 Introduction to Black and White Photography 3 cr. hrs.
ART 335 Studio - Photography 3 cr. hrs.
JOUR 245 Writing for Film and Television 3 cr. hrs.
JOUR 265 Beginning Photography 3 cr. hrs.
JOUR 266 Photojournalism 3 cr. hrs.
JOUR 269 Feature Writing for Magazines and Newspapers 2 cr. hrs.
JOUR 360 Opinion Writing 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
SCTA 151 Broadcast Performance I 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
SCTA 351 Broadcast Performance II 3 cr. hrs.
Psychology (PSYC)
Department of Psychology
College of Arts and Sciences

151 Centennial Science Hall
(715) 425-3306
http://www.uwrf.edu/psych/welcome.html

Bradley Caskey-Chair, Lisa Isenberg, Cynthia Kernahan, Daniel Linwick, Virgil Nylander, Barbara Rebhuhn, Michael Reich, Richard Seefeldt, Travis Tubré

The mission of the Department of Psychology's undergraduate program is: (1) to provide students an understanding of the content and methods of psychology, (2) to prepare students for a lifetime of learning and thinking by cultivating their intellectual skills, and (3) to promote personal characteristics that are consistent with high ethical standards and a sensitivity to issues of culture, ethnicity, and gender. The department's curriculum strives to prepare students both for graduate school and the world of work by instilling in students a basic science orientation, and by offering applied courses and experiences. Psychology is one of the subject fields comprising the Broad Field Social Studies major. For information about this major, see page 163.

General Education Requirements as listed on pages pages 34-35 with the following exceptions: General Psychology and Behavioral Statistics are required of all majors and minors but do not count toward the required hours if used to fulfill general education requirements.

Psychology Major: 36 Total Credits
Core Requirements: 19 cr. hrs.
PSYC 101 General Psychology (credits can be counted in general education) (0 or 3)
PSYC 201 Behavioral Statistics (credits can be counted in general education) (0 or 3)
PSYC 110 Psychology Colloquium I 1 cr. hr.
PSYC 205 Research Methods (writing intensive) 3 cr. hrs.
PSYC 265 Social Psychology 3 cr. hrs.
PSYC 305 Learning and Motivation 3 cr. hrs.
PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
PSYC 355 Physiological Psychology 3 cr. hrs.
PSYC 401 History and Systems of Psychology 3 cr. hrs.
Required Courses: 9 cr. hrs.
Choose one of the following two courses: PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. hrs.
PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. hrs.
Choose one of the following two courses:
PSYC 310 Memory and Thinking 3 cr. hrs.
PSYC 350 Sensation and Perception 3 cr. hrs.
Choose one of the following two courses:
PSYC 320 Psychology of Personality 3 cr. hrs.
PSYC 325 Abnormal Psychology 3 cr. hrs.
Directed Electives: 8 cr. hrs.
May be any courses in psychology. All psychology majors are required to participate in the departmental assessment of the psychology major. This involves keeping a portfolio, taking surveys, and a general psychology achievement test in their first and last year in the program.

Psychology Minor: 24 Total Credits
Required Courses: (3 or 9 cr. hrs.)
PSYC 101 General Psychology (credits can be counted in general education) (0 or 3) PSYC 201
Behavioral Statistics (credits can be counted in general education) (0 or 3) PSYC 205 Research
Methods (writing intensive) or PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
Electives: Seven additional courses in Psychology to total 24 credits (15 or 19)
If Psychology 101 and/or 201 is not used to fulfill general education requirements, they can count
toward the required 24 minor hours. Sociology majors with a minor in psychology who have taken
SOCI 300, Research Methods, may substitute a psychology course for the PSYC 205 or PSYC 315
requirement. The recommended sequence for psychology majors and minors is 101, 201 and 205.
Science, Broad Field
Interdisciplinary Program

125 Centennial Science Hall
(715) 425-3196

Earl Blodgett-Coordinator; Biology, Brad Mogen (3364); Chemistry, Jeffrey Rosenthal (3538); Physics, Earl Blodgett (3196); Plant and Earth Science, Robert W. Baker (3345)

The Broad Field Sciences Programs are monitored by a committee formed of representatives from the Departments of Biology, Chemistry, Physics, and Plant and Earth Science. Students choosing one of these programs will typically be assigned an advisor from one of these departments. The Broad Field Science Programs are interdepartmental programs tailored to various interdisciplinary niches in the sciences. These programs are the equivalent of a major and a minor. A student selecting one of these programs is not required to have an additional minor. Two of these programs lead to certification in secondary or middle school education. Students interested in certification in those programs should consult the Secondary Education Handbook for Undergraduates (http://www.uwrf.edu/college-of-education/Handbooks.htm) for the detailed requirements for various levels of certification in Wisconsin and Minnesota.

General Education Requirements
Arts and Sciences as listed on pages 34-35;
Agriculture, Food and Environmental Sciences as listed on pages 26-27;
and Education and Professional Studies as listed on pages 47 48.
The General Education Science Requirement will be fulfilled by taking any of the following majors.

Broad Field Science Major - Liberal Arts: 60 Total Credits
Required Courses: 41 cr. hrs.
BIOL 150 General Biology 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
GEOL 101 Introductory Geology 3 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 150 Historical Geology 4 cr. hr.
GEOL 202 Oceanography 2 cr. hrs.
ISCI 497 Interdisciplinary Capstone in Science 2 cr. hrs.
Choose either sequence A or B below:
A. PHYS 151 General Physics I 4 cr. hr.
PHYS 152 General Physics II 4 cr. hr.
PHYS 156 General Physics Laboratory I 1 cr. hr.
PHYS 157 General Physics Laboratory II 1 cr. hr.
B. PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
Directed Electives: 13-16 cr. hrs.
(select two areas)
BIOL 240 Cell Biology 3 cr. hrs.
BIOL 310 Identification of Plants 3 cr. hrs.
CHEM 230 General Organic Chemistry 3 cr. hrs.
or CHEM 231 Organic Chemistry I
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
GEOL 230 Mineralogy 4 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hr.
PHYS 264 General Physics III 4 cr. hr.
PHYS 300 level or higher, excluding 361 and 362 3 cr. hrs.
Electives: Select from BIOL, CHEM, GEOL, PHYS 3-6 cr. hrs.

Broad Field Science Major - Education: Broad Science Certification
This program leads to certification for middle school general science through 9th grade general science. Completion of the middle school coursework in TED is required. Additional certification at the secondary school level is available in Wisconsin for any of the four science areas with at least 15 semester hours. The equivalent licensure in Minnesota expects equal amounts of life science, earth science, and physical science.

Broad Field Science Major - Education: Broad Science Certification 63 Total Credits
Requirements as listed for the Broad Field Science Major - Liberal Arts 60 ESM 300 Environmental Education 3 cr. hrs.
or GEOG 300 Environmental Education or 3 cr. hrs.
This program leads to certification for secondary school chemistry, physics, and physical science. Minnesota requires middle school licensure as well as secondary.

Broad Field Science Major - Education: Physical Science Certification 63 Total Credits
CHEM 111 General Chemistry I 4 cr. hr.
CHEM 112 General Chemistry II 4 cr. hr.
CHEM 116 General Chemistry Lab I 1 cr. hr.
CHEM 117 General Chemistry Lab II 1 cr. hr.
CHEM 230 General Organic Chemistry 3 cr. hrs.
or CHEM 231 Organic Chemistry I
CHEM 236 Organic Chemistry Lab I 1 cr. hr.
CHEM 251 Analytical Chemistry 2 cr. hrs.
CHEM 256 Analytical Chemistry Lab 2 cr. hrs.
PHYS 101 General Physics Laboratory I 1 cr. hr.
PHYS 102 General Physics Laboratory II 1 cr. hr.
PHYS 161 General Physics I 4 cr. hr.
PHYS 162 General Physics II 4 cr. hr.
PHYS 264 General Physics III 4 cr. hr.
PHYS 311 Electronics: Circuits and Devices 3 cr. hrs.
PHYS 331 Curriculum Physics 3 cr. hrs.
MATH 166 Calculus I 4 cr. hr.
MATH 167 Calculus II 4 cr. hr.
ESM 300 Environmental Education 3 cr. hrs.
or GEOG 300 Environmental Education or 3 cr. hrs.
ISCI 497 Interdisciplinary Capstone in Science 2 cr. hrs.
Directed Electives 12 cr. hrs.
Chemistry-Choose 6 cr. hrs. from:
CHEM 232 Organic Chemistry II 4 cr. hr.
CHEM 237 organic Chemistry Lab II 1 cr. hr.
CHEM 311 Polymer Chemistry 3 cr. hrs.
CHEM 340 Physical Chemistry of Biological Systems 3 cr. hrs.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. hrs.
CHEM 356 Chemical Instrumentation Lab 1 cr. hr.
CHEM 361 Biochemistry I 3 cr. hrs.
CHEM 411 Polymer Science 3 cr. hrs.
CHEM 422 Advanced Inorganic Chemistry 3 cr. hrs.
CHEM 461 Pharmacology 3 cr. hrs.

Physics-Choose 3 cr. hrs. from:
PHYS 300 level or higher, excluding 361 and 362 3 cr. hrs.

Math-Choose 3 cr. hrs. from:
MATH 266 Calculus III 3 cr. hrs.
or PHYS 361 Mathematics of Physics and Engineering
Elementary and middle school teachers are required to take ESM/GEOG 300 Environmental Education as part of the General Education Science requirement. Completion of the General Science Minor will complete the remainder of the science requirement.

General Science Minor for Elementary and Middle School Science Teachers: 29-30 Total Credits
Select all courses from any one area:
Biology 12 cr. hrs.
BIOL 150 General Biology 3 cr. hrs.
BIOL 210 General Botany 3 cr. hrs.
BIOL 230 General Zoology 3 cr. hrs.
BIOL 253 Human Biology 3 cr. hrs.

Chemistry 12 cr. hrs.
CHEM 101 Elementary Principles of Chemistry 3 cr. hrs.
CHEM 200 Chemistry and the Environment 3 cr. hrs.
CHEM 210 Topics in Consumer Chemistry 3 cr. hrs.
CHEM 220 Chemistry of Life 3 cr. hrs.

Geology 12 cr. hrs.
GEOL 101 Introductory Geology 3 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 150 Historical Geology 4 cr. hr.
GEOL 202 Oceanography 2 cr. hrs.
GEOL 330 Meteorology 2 cr. hrs.

Physics 11 cr. hrs.
PHYS 114 Basic Physics 3 cr. hrs.
PHYS 117 Introductory Astronomy 3 cr. hrs.
PHYS 220 The Science of Light 3 cr. hrs.
PHYS 321 Physical Acoustics I 2 cr. hrs.

Select 6 cr. hrs. from each of the three areas not chosen above, but not GEOL 150 nor 330 nor PHYS 321 18 cr. hrs.
Speech Communication and Theatre Arts (SCTA)
Department of Speech Communication and Theatre Arts
College of Arts and Sciences

B-24 Kleinpell Fine Arts Building
(715) 425-3971

Margaret M. Swanson-Chair, Suzanne Hagen, Robin Murray, James Pratt, Ronald Snell, Kenneth Stofferahn, Richard Vogel, Barbara L. Werner, James Zimmerman

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.

Speech Communication Major - Liberal Arts, B.S.
Speech Communication Emphasis 34 Total Credits
Required Courses: 16 cr. hrs.
SCTA 106 Interpersonal Communication 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Directed Electives: 18 cr. hrs.
SCTA 111 Argumentation and Decision Making 3 cr. hrs.
SCTA 206 Family Communication 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
or SCTA 316 Organizational Communication
SCTA 211 Public Speaking 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.
SCTA 319 Freedom to Speak 3 cr. hrs.
SCTA 414 Speech in History 3 cr. hrs.
SCTA 440 Gender Communication 3 cr. hrs.
SCTA 370 Intercollegiate Debate 1 cr. hr.
or SCTA 371 Intercollegiate Forensics
or 1 SCTA 379 Internship 3-12 cr. hrs.
SCTA 499 Independent Study/Independent Research 1-3
Theatre Emphasis 36 Total Credits
Required Courses: 23 cr. hrs.
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.
SCTA 131 Design for the Theatre 3 cr. hrs.
SCTA 288 Career Development: Theatre Arts 1 SCTA 335 Directing I 3 cr. hrs.
SCTA 337 History of Theatre - Ancient through Renaissance 3 cr. hrs.
SCTA 338 History of Theatre - 18th Century to Present 3 cr. hrs.
or SCTA 339 American Theatre
SCTA 379 Internship 3-12 cr. hrs.
SCTA 499 Independent Study/Independent Research 1-3 cr. hrs.
SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Directed Electives: 9 cr. hrs.
Determined in consultation with advisor, depending on student focus Choose one from the following:

SCTA 231 Stage Technology and Scene Painting 3 cr. hrs.
SCTA 332 Stage Costuming 3 cr. hrs.
SCTA 333 Stage Lighting 3 cr. hrs.
Choose one from the following:
SCTA 221 Acting II: Characterization 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
SCTA 435 Directing II 3 cr. hrs.
Choose one from the following:
SCTA 230 Playwrights of Color 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
SCTA 336 Costume and Fashion: Mirror of History 3 cr. hrs.
SCTA 338 History of Theatre - 18th Century to Present 3 cr. hrs.
SCTA 339 American Theatre 3 cr. hrs.
Directed Electives: 4 cr. hrs.
SCTA 232 Makeup for Theatre, Film, and Video 3 cr. hrs.
SCTA 271 Summer Theatre 1-3
SCTA 323 Arts Management 3 cr. hrs.
SCTA 327 Children's Theatre and Puppetry 3 cr. hrs.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.
SCTA 375 Theatre Practicum: Production 1 cr. hr.
SCTA 376 Theatre Practicum: Design and Technology 1 cr. hr.

Required Courses: 22-23 cr. hrs.
SCTA 106 Interpersonal Communication 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 216 Communication in the Interview 3 cr. hrs.
SCTA 316 Organizational Communication 3 cr. hrs.
SCTA 379 Internship 3-12 cr. hrs.
SCTA 499 Independent Study/Independent Research
and/or 1-3 SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Directed Electives: 12 cr. hrs.
SCTA 111 Argumentation and Decision Making 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 311 Persuasion 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SCTA 318 Communication and Leadership 3 cr. hrs.
SCTA 360 Corporate Electronic Communication 3 cr. hrs.
SCTA 416 Communication Training and Development in Organizations 3 cr. hrs.
SCTA 440 Gender Communication 3 cr. hrs.

After consultation with the academic advisor, up to 6 directed elective credits from the approved list of courses in other departments may be taken to achieve a specific career path.

Mass Communication Emphasis 35 Total Credits
Required Courses: 26 cr. hrs.
SCTA 151 Broadcast Performance 3 cr. hrs.
SCTA 160 TV Studio Production 3 cr. hrs.
SCTA 260 Electronic Field Production 3 cr. hrs.
SCTA 261 Electronic Media Copy Writing 3 cr. hrs.
SCTA 310 Media Literacy - A Weapon Against Propaganda 3 cr. hrs.
SCTA 360 Corporate Electronic Communication 3 cr. hrs.
SCTA 377 Mass Communication Practicum 1 cr. hr.
SCTA 458 Broadcast Programming and Criticism 3 cr. hrs.
SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Directed Electives: 9 cr. hrs.
Choose one from the following:
SCTA 353 Mass Media and Popular Culture 3 cr. hrs.
SCTA 340 Gender, Race, Ethnicity and Class in Media 3 cr. hrs.
Choose one from the following: SCTA 311 Persuasion 3 cr. hrs.
JOUR 345 History of Mass Communication 3 cr. hrs.
Choose one from the following:
SCTA 379 Internship in SCTA 3-12 cr. hrs.
SCTA 200 Introduction to Film Studies 3 cr. hrs.
SCTA 216 Communication in the Interview 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 248 Film - Cultures in Conflict 3 cr. hrs.
SCTA 301 Film History 3 cr. hrs.
JOUR 319 The Media and American Politics 3 cr. hrs.
JOUR 455 Mass Media and Society 3 cr. hrs.
JOUR 465 Mass Communication Law 3 cr. hrs.
SCTA 499 Independent Study/Independent Research 1-3

Speech Communication Major - Liberal Arts B.A.: 34 Total Credits
Required Courses: 4 cr. hrs.
SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Directed Electives: 30 cr. hrs.
An approved plan of study must be filed with the Department of SCTA by the beginning of the junior year or immediately upon declaring a SCTA major.

Speech Communication Major - Secondary Education: 37 Total Credits
Required Courses: 31 cr. hrs.
SCTA 106 Interpersonal Communication 3 cr. hrs.
SCTA 111 Argumentation and Decision Making 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 211 Public Speaking 3 cr. hrs.
or SCTA 311 Persuasion
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.
SCTA 403 Directing the Secondary School Forensics Program 3 cr. hrs.
SCTA 407 Listening Instruction 3 cr. hrs.
SCTA 414 Speech in History 3 cr. hrs.
SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. hr.
Electives in SCTA 6 cr. hrs.

Speech Communication Minor - Secondary Education: 24 Total Credits
Required Courses: 24 cr. hrs.  
SCTA 106 Interpersonal Communication 3 cr. hrs.  
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.  
SCTA 211 Public Speaking 3 cr. hrs.  
or SCTA 311 Persuasion  
SCTA 306 Nonverbal Communication 3 cr. hrs.  
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.  
SCTA 403 Directing the Secondary School Forensics Program 3 cr. hrs.  
SCTA 407 Listening Instruction 3 cr. hrs.  
SCTA 414 Speech in History 3 cr. hrs.  

A research/writing course experience is required in the major or another field; SCTA 284 Sophomore Seminar or another course approved by the department chair, will satisfy this requirement. A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.

Speech Communication Minor - Elementary Education: 24 Total Credits  
Required Courses: 9 cr. hrs.  
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.  
SCTA 306 Nonverbal Communication 3 cr. hrs.  
SCTA 407 Listening Instruction 3 cr. hrs.  

Directed Electives: 9 cr. hrs.  
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.  
SCTA 327 Children's Theatre and Puppetry 3 cr. hrs.  
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.  
SCTA 335 Directing I 3 cr. hrs.  
or SCTA 231 Stage Technology and Scene Painting  

Electives in SCTA: 6 cr. hrs.  
A research/writing course experience is required in the major or another field; SCTA 284 Sophomore Seminar or another course approved by the department chair, will satisfy this requirement. A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.

Speech Communication Minor - Liberal Arts, B.S.: 24 Total Credits  
Required Courses 12 cr. hrs.  
SCTA 106 Interpersonal Communication 3 cr. hrs.  
SCTA 207 Listening Skills 3 cr. hrs.  
SCTA 306 Nonverbal Communication 3 cr. hrs.  
SCTA 311 Persuasion 3 cr. hrs.  

Directed Electives 12 cr. hrs.  
SCTA 111 Argumentation and Decision Making 3 cr. hrs.  
SCTA 206 Family Communication 3 cr. hrs.  
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.  
or SCTA 316 Organizational Communication  
SCTA 211 Public Speaking 3 cr. hrs.  
SCTA 313 Intercultural Communication 3 cr. hrs.  
SCTA 314 Introduction to Criticism for Oral Communication 3 cr. hrs.  
SCTA 319 Freedom to Speak 3 cr. hrs.  
SCTA 414 Speech in History 3 cr. hrs.  
SCTA 440 Gender Communication 3 cr. hrs.
SCTA 370 Intercollegiate Debate 1 cr. hr.
or SCTA 371 Intercollegiate Forensics
or 1 SCTA 379 Internship in SCTA 3-12 cr. hrs.
SCTA 499 Independent Study/Independent Research
A research/writing course experience is required in the major or another field; SCTA 284 Sophomore Seminar or another course approved by the department chair, will satisfy this requirement.
A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.
The degree curricula designed to prepare teachers for the secondary school, grades 9-12, consists of a minimum of 120 semester hours that give the student a broad general education, specialized preparation in one or more academic fields and professional preparation needed for effective teaching. Specific course requirements are listed for each academic department preceding the departmental course descriptions.

General Education Requirements as listed on pages pages 47-48
Coursework included in the professional sequence, major, minor or concentration may not be included in the general education component.

Bachelor of Science in Secondary Education
Professional Requirements: 31-43 Total Credits
TED 115 Introduction to Middle/Secondary Education 1 cr. hr.
TED 156 Instructional Materials and Equipment 1 cr. hr.
TED 212 Educational Psychology: Middle and Secondary Ed (writing intensive) 5 cr. hrs.
Admission to teacher education is required before students can enroll in 420, 422, 423.
TED 420 School and Society (writing intensive) 3 cr. hrs.
TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. hrs.
TED 423 Writing, Speaking and Listening in the Content Area 3 cr. hrs.
Admission to teacher education is required before students can enroll in technique courses.
TED 430-441 Techniques of Middle/Secondary Education 3 cr. hrs.
TED 474 Student Teaching: Secondary 1-12 cr. hrs.
TED 473 Student Teaching: Middle Level 1-6 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.

University and DPI General Education Requirements
Academic Specialization: 54-58 Total Credits
Option A - Departmental major and one minor
Option B - Two departmental majors
Option C - Broad Field major

Approved Secondary Education Majors and Minors
Comprehensive Majors:
Art (K-12)
Broad Area/Physical Science
Broad Area Social Studies 1,2
English, Broad Area Physical Education (K-12) 1
Music (K-12)
Majors:
Agricultural Education
Applied Computer Systems
Art
Biology
Chemistry
Communicative Disorders
Earth Science
English
Journalism
Mathematics
Modern Language (French, German, Spanish)
Physics
Social Studies
Speech
Minors: Anthropology
English
Journalism
Athletic Coaching
French
Mathematics
Biology
General Science
Physics
Chemistry
Geography
Political Science
Computer Science
German
Spanish
Dance
Health Education
Speech
Earth Science
History
Sociology
Economics

1Cooperatives. Wisconsin law requires that teachers of Economics, social studies and agriculture complete adequate instruction in consumers' cooperatives and cooperative marketing. Students in agriculture can satisfy this requirement by successful completion of AGEC 240 or 355. Students in Economics and social sciences can satisfy this requirement by successful completion of TED 433 or AGEC 240 or 355.

2If you are interested in teaching Economics, geography, history, political science, psychology or sociology, please see Social Sciences, Broad Area.
The Department of Sociology, Anthropology, and Criminal Justice offers several options for Majors and Minors:

1. Major in Sociology Liberal Arts—Sociology Major may be used as part of a Broad-Field Social Studies Major;
2. Minor in Sociology—Liberal Arts;
3. Minor in Sociology-Education;
4. Minor in Anthropology;
5. Minor in Criminal Justice (Sociology Major); and

General Education Requirements:
BA and BS Liberal Arts majors as listed on pages 34-35.
BS Education majors as listed on pages 47-48.
Social and Behavioral Sciences: SOCI 100 or ANTH 100

Sociology Major: 39 Total Credits
Core Requirements: 18 cr. hrs.
SOCI 100 Introduction to Sociology (counts 3 cr. in Gen. Ed.)
or ANTH 100 Introduction to Anthropology (counts 3 cr. in Gen. Ed.)
SOCI 200 Sociological Inquiry 3 cr. hrs.
SOCI 208 Sociology of Diversity 3 cr. hrs.
or SOCI 225 Sociology of Race and Ethnicity
or ANTH 225 Sociology of Race and Ethnicity
SOCI 250 Social Statistics 3 cr. hrs.
SOCI 300 Research Methods 3 cr. hrs.
SOCI 400 Social and Cultural Theory 3 cr. hrs.
SOCI 480 Senior Seminar 3 cr. hrs.
Directed Electives: 21 cr. hrs.
15 credits must be at 300/400 level with at least 6 credits at the 400 level
SOCI 205 Culture and Personality 3 cr. hrs.
or ANTH 205 Culture and Personality
SOCI 211 Global Perspectives on Children 3 cr. hrs.
or ANTH 211 Global Perspectives on Children
SOCI 218 Deviant Behavior 3 cr. hrs.
SOCI 221 Global Perspectives on Women 3 cr. hrs.
or ANTH 221 Global Perspectives on Women
SOCI 227 Religious Groups and Cults 3 cr. hrs.
SOCI 228 Native American Cultures 3 cr. hrs.
or ANTH 228 Native American Cultures
SOCI 230 Sociology of Sport and Leisure 3 cr. hrs.
SOCI 240 Social Problems 3 cr. hrs.
SOCI 245 Environmental Sociology 3 cr. hrs.
SOCI 247 Human Diversity and Development 3 cr. hrs.
or ANTH 247 Human Diversity and Development
SOCI 315 Sociology of Later Life 3 cr. hrs.
SOCI 323 Sociology of the Family 3 cr. hrs.
SOCI 326 Sociology of Gender Roles 3 cr. hrs.
SOCI 330 Social Organization 3 cr. hrs.
SOCI 338 Global Perspectives on Health and Disease 3 cr. hrs.
or ANTH 338 Global Perspectives on Health and Disease
SOCI 340 Sociology of Rural Life 3 cr. hrs.
SOCI 345 Sociology of Urban Life 3 cr. hrs.
SOCI 348 Faces of Culture 3 cr. hrs.
or ANTH 348 Faces of Culture
SOCI 378 Semester Abroad Research 3-6
SOCI 389 Special Topics in Sociology 2-3
or ANTH 389 Special Topics in Anthropology
or 2-3 SOCI 410 Social Psychology 3 cr. hrs.
SOCI 435 Social and Cultural Change 3 cr. hrs.
or ANTH 435 Social and Cultural Change
SOCI 445 Power and Inequality 3 cr. hrs.
SOCI 490 Readings in Sociology 1-2 cr. hrs.
or ANTH 490 Readings in Anthropology
or 1-2 SOCI 499 Independent Study 1-2 cr. hrs.
or ANTH 499 Independent Study or 1-2 cr. hrs.

Sociology Minor - Liberal Arts or Education: 24 Total Credits
Required Courses: 9 cr. hrs.
SOCI 100 Introduction to Sociology (counts 3 cr. in Gen. Ed.)
or ANTH 100 Introduction to Anthropology (counts 3 cr. in Gen. Ed.)
SOCI 200 Sociological Inquiry 3 cr. hrs.
SOCI 208 Sociology of Diversity 3 cr. hrs.
or SOCI 225 Sociology of Race and Ethnicity
or ANTH 225 Sociology of Race and Ethnicity
SOCI 400 Social and Cultural Theory 3 cr. hrs.
General Electives in Sociology/Anthropology 15 cr. hrs.
(at least 9 credits must be at 300/400 level)

Broad Field Social Studies Major
For those who wish to teach sociology in high school, the required major is the Broad Field Social Studies Major, see page 163.
The Broad Field Social Studies (BFSS) degree is the preferred degree for secondary teaching in the area of social studies. This degree offers many options and great versatility. The program requires that the student have a concentration (a major) in one of the social sciences and then additional work in the other social sciences. The concentration gives the degree maximum flexibility if the student does not continue in the field of education.

General Education Requirements as listed on pages pages 34-35 with the following exceptions:
Social and Behavioral Science:
POLS 114 American, National, State and Local Government
PSYC 101 General Psychology
TED 252 Foundations of Multicultural Education
ESM/GEOL 300 Environmental Education

Professional Secondary Education Requirements: See page 161. 37 Total Credits

Broad Field Social Studies Major: 66-69 Total Credits
Meet major requirements in one of the following: 36-39 cr. hrs.
Economics, Geography, History, Political Science, Psychology or Sociology Contact individual
departments for program requirements.
Directed Electives: 30 cr. hrs.
Any social science other than the concentration 9 cr. hrs.
Any social science other than the concentration 9 cr. hrs.
One course in each of the remaining social sciences 12 cr. hrs.
Geography Requirements: 18 cr. hrs.
GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. hr.
GEOG 120 Human Geography 3 cr. hrs.
GEOG 240 United States 3 cr. hrs.
GEOG 250 Cartography I 3 cr. hrs.
GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. hrs.
GEOG 401 Senior Colloquium in Geography 2 cr. hrs.
Directed Electives: 6 cr. hrs.
(See Geography Major without a Cartography Minor, p.112)
Electives: 12 cr. hrs.
(See Geography Major without a Cartography Minor, p.112) Distribution: 30 cr. hrs.
Select 30 credits from at least two of the following: Anthropology, Economics, History, Political
Science, Psychology, Sociology 9 credits from each of two of the above areas 18 3 cr. hrs.
from each of four of the above areas 12 cr. hrs.
Soil Science (SOIL)
Department of Plant and Earth Science
College of Agriculture, Food and Environmental Sciences

324 Agriculture Science Hall
(715) 425-3345
Web Site: www.uwrf.edu/pes/welcome.html

Robert W. Baker-Chair, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove,
Michael Crotser, Terry L. Ferriss, Michael C. Kaltenberg, Kerry L. Keen, N. Larry Meyers, Michael D.
Middleton, Lanny Neel, Eric M. Sanden, Brian R. Smith, Roger A. Swanson, Donovan H. Taylor, Laine
Vignona, Ian S. Williams

Soil Science Minor: 22 Total Credits
Choose from the following:
SOIL 311 Soil Fertility 4 cr. hrs.
SOIL 325 Hydric Soils and Wetland Environments 3 cr. hrs.
SOIL 350 Pedology 4 cr. hrs.
SOIL 440 Soil and Water Conservation 4 cr. hrs.
SOIL 460 Soil Physics 3 cr. hrs.
GEOL 101 Introductory Geology 3 cr. hrs.
GEOL 102 Introductory Geology Lab 1 cr. hr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. hrs.
The minor in Social Science, available for majors in elementary and middle school (6-9) education is a program of study comprised of several social science disciplines: economics, geography, history, political science and sociology. For information about this minor see the program listing for history.

Social Science Minor: 30 Total Credits

- HIST 102 Origins of One World 3 cr. hrs.
- HIST 103 U.S. History to 1877 3 cr. hrs.
- HIST 104 U.S. History Since 1865 3 cr. hrs.
- GEOG 110 Physical Environment: Patterns and Systems 3 cr. hrs.
- GEOG 120 Human Geography 3 cr. hrs.
- ECON 100 Modern Economics 3 cr. hrs.
- SOCI 100 Introduction to Sociology 3 cr. hrs.
- ANTH 100 Introduction to Anthropology 3 cr. hrs.
- POLS any POLS course excluding POLS 114 3 cr. hrs.
- PSYC any PSYC course excluding 101 and 330 3 cr. hrs.
Social Work (SOWK)
College of Education and Professional Studies

203 Wyman Education Building
(715) 425-3655

Ogden Rogers-Program Director, Ruth A. Kalms, Jennifer E. Borup

The four-year curriculum leading to a bachelor's degree in Social Work is listed below. The minimum of 120 semester credits required for graduation provides students with knowledge, values, and skills necessary for the beginning level of generalist social work practice.

General Education Requirements as listed on pages [47-48] with the following exceptions:

Social and Behavioral:
- ECON 100, POLS 114, PSYC 101 required as supporting courses.

Sciences:
- BIOL 100 required as supporting course.

Mathematics:
- PSYC 201 or MATH 226 required as supporting course.

Liberal Arts:
- BIOL 253 required as a supporting course.

Social Work Major: 54 cr. hrs.
- SOWK 150 Introduction to Social Work Services 3 cr. hrs.
- SOWK 205 Introduction to Social Work and Social Welfare 3 cr. hrs.
- SOWK 215 Human Behavior and Social Environment 3 cr. hrs.
- SOWK 250 Use, Abuse, and Addiction 3 cr. hrs.
- SOWK 300 Research Methods 3 cr. hrs.
- SOWK 324 Theory and Practice of Social Work I 3 cr. hrs.
- SOWK 325 Theory and Practice of Social Work II 3 cr. hrs.
- SOWK 350 Social Welfare Policy 3 cr. hrs.
- SOWK 389 Special Topics in Social Work (2) 6
- SOWK 424 Advanced Interviewing and Crisis Intervention 3 cr. hrs.
- SOWK 472 Social Work Field Instruction (2) 12 cr. hrs.
- SOWK 480 Senior Integrative Seminar 3 cr. hrs.
- SOWK 481 Integrating Practice and Research 3 cr. hrs.

Required Supporting Courses: 8 cr. hrs.
- SOWK 100 Introduction to Sociology 3 cr. hrs.
- CPTS 105 Microcomputer Applications 2 cr. hrs.
- SOWK 260 Practice with Diverse Populations 3 cr. hrs.

Directed Electives: 3 cr. hrs.
- SOCI 218 Deviant Behavior 3 cr. hrs.
- SOCI 221 Global Perspectives on Women 3 cr. hrs.
- SOCI 315 Sociology of Later Life 3 cr. hrs.
- SOCI 323 Sociology of the Family 3 cr. hrs.
- SOCI 330 Social Organizations 3 cr. hrs.
- SOCI 338 Global Perspectives on Health and Disease 3 cr. hrs.
- SOCI 435 Social and Cultural Change 3 cr. hrs.
- SOCI 445 Power and Inequality 3 cr. hrs.
- CJ 202 Introduction to Criminal Justice 3 cr. hrs.
- CJ 320 Juvenile Delinquency 3 cr. hrs.
- CJ 322 Criminology 3 cr. hrs.
CJ 430 Trends and Issues in Incarceration 3 cr. hrs.
SCTA 206 Family Communication 3 cr. hrs.
SCTA 207 Listening Skills 3 cr. hrs.
SCTA 208 Problem Solving in Small Group Communication 3 cr. hrs.
SCTA 318 Communication and Leadership 3 cr. hrs.
PSYC 236 Developmental Psychology: childhood and Adolescence 3 cr. hrs.
PSYC 330 The Exceptional Child 3 cr. hrs.
PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. hrs.
PSYC 365 Individual and Group Processes 3 cr. hrs.
PSYC 420 Introduction to Learning Disabilities 3 cr. hrs.
PSYC 421 Mental Retardation 3 cr. hrs.
POLS 225 Introduction to Public Administration 3 cr. hrs.
POLS 253 State and Local Politics 3 cr. hrs.
POLS 256 Public Policymaking 3 cr. hrs.
HIST 310 History of American Political Thought 3 cr. hrs.
WMST 200 Introduction to Women’s Studies 3 cr. hrs.
INTS 200 Introduction to International Studies 3 cr. hrs.
The four-year curriculum leading to the bachelor's degree in Elementary Education, designed to prepare teachers for elementary schools, grades 1-6, consists of a minimum of 132 semester hours that give students a broad general education, professional preparation for effective teaching at the elementary education level, and special preparation in an academic minor. Upon completion of these requirements, the elementary education major is certifiable for grades 1-6. Additional coursework is required for middle school (7-9) certification. Addition of the early childhood minor meets requirements for pre-k and kindergarten certification.

Admission to Teacher Education is required the semester prior to enrolling in the Block sequence. See the college web page http://www.uwrf.edu/college-of-education/ for a complete list of requirements for admission and current admission deadline dates.

Students spend three days per week for two semesters at public schools with innovative instructional programs. The techniques blocks involve two semesters of the junior year and includes the following courses:
- **Block I:** TED 310, 311, 312 12 cr. hrs.
- **Block II:** TED 315, 316, 317 12 cr. hrs.

General Education Requirements as listed on pages pages 47-48.

Elementary Education Major: 44 Total Credits
- TED 211 Educational Psychology: Elementary Education (writing intensive) 5 cr. hrs.
- TED 420 School and Society (writing intensive) 3 cr. hrs.
- TED 310 Techniques in Elementary Education: Language Arts 4 cr. hr.
- TED 311 Techniques in Elementary Education: Social Studies 4 cr. hr.
- TED 312 Techniques in Elementary Education: Science 4 cr. hr.
- TED 315 Techniques in Elementary Education: Mathematics 4 cr. hr.
- TED 316 Developmental Reading 4 cr. hr.
- TED 317 Reading Practicum 4 cr. hr.
- TED 472 Student Teaching: Elementary Education 12 cr. hrs.

Required Courses: 15 cr. hrs.
- TED 255 Reading Guidance for Children 3 cr. hrs.
- or ENGL 250 Literature for Children
- ART 250 Child Art 2 cr. hrs.
- MUS 350 Music for Elementary Teachers 2 cr. hrs.
- PSYC 330 The Exceptional Child 3 cr. hrs.
- HEAL 361 Methods and Materials in Health for the Elementary Teacher 3 cr. hrs.
- PED 326 Techniques in Physical Education for the Elementary School Teacher 2 cr. hrs.

Minor Areas: Elementary education majors must select a minor which meets two criteria:
1) it must be a certifiable curriculum area, and
2) it must be an important subject taught in elementary schools.

Minors recommended for the Elementary Education Major by the Wisconsin Department of Public Instruction include:
Early Childhood
Health Education

Language Arts/Reading Science
Mathematics
Modern Language
Social Studies
Speech Communication

Other acceptable minors are:
Anthropology
Biology
Chemistry
Coaching/Athletics
Communicative Disorders
Computer Science
Dance
Earth Science
Economics
English
Geography
History
Journalism
Philosophy
Physics
Political Science
Psychology
Sociology
Teaching English to Speakers of Other Languages (TESOL)
Department of English
College of Arts and Sciences
245 Kleinpell Fine Arts Building
(715) 425-3537


TESOL Major - Liberal Arts: 36 Total Credits
Foreign Language Requirement: (6 cr. hrs.)
(credits not counted in major)
6 semester hours of a foreign language, the high school equivalent, or proven proficiency in a foreign language is required of all students pursuing a TESOL major. This foundation requirement is not included in the number of credit hours needed for the major proper. The 6 semester hours are separate from the Cultural Component. A first language used by a major who is a non-native speaker of English to satisfy this language requirement cannot be used as the basis for satisfying the cultural requirement below; study in the English language should be used for such a student or, in the case of fluency in English, the student may request to do the cultural component in a language other than English or the student’s native language. In the case of fluency in both English and a native language, a student may elect to satisfy this language requirement by a third language.

Required Courses: 24 cr. hrs.
ENGL 302 Theory and Methodology of TESOL 3 cr. hrs.
ENGL 311 Introduction to Language and Linguistics 3 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
ENGL 420 Pedagogical Grammar 3 cr. hrs.
PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
COMD 263 Phonetics 3 cr. hrs.

Directed Electives: 12-14 cr. hrs.
Cultural Component 6-8 cr. hrs.
Choose one of the following four ways to fulfill this component:
1. Foreign Language 6-8 cr. hrs. Course work to fulfill the Cultural Component must be in one language; test out credits must be supplemented by 3 credits at the 200 level or above. The Cultural Component requirement may be fulfilled with course work in the same language as that required for the Foreign Language requirement or in a different language, but additional foreign language course work must be beyond that required for the Bachelor of Science or Bachelor of Arts degree. Alternative cultural component features for international students: International students who select this major generally have learning circumstances and career goals that differentiate them from native English speakers. Therefore, course work in English (6-8 credits at the 200-level or above) selected in consultation with the advisor must be used to fulfill the cultural component. (In the case of fluency in English, an international student may request to do the cultural component foreign language option in a language other than English.) or
2. ENGL 378 Any University 378, Semester Abroad Research 6 cr. hrs. or
3. INTS 377 Semester Abroad 6 cr. hrs. or
4. Select two of the following courses: 6 cr. hrs.
ENGL 379 Cooperative Education and Internship II 3 cr. hrs.
ENGL 450 Non-Native Speakers in the Midwest 3 cr. hrs.
ENGL 471 Issues in Bilingualism 3 cr. hrs.
MODL 376 Mexico: A Cultural Experience 3 cr. hrs.
Select two of the following courses: 6 cr. hrs.
ANTH 348 Faces of Culture 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SOCI 205 Culture and Personality 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.

TESOL Minor - Liberal Arts: 24 Total Credits
Foreign Language Requirement: (6 cr. hrs.)
(credits not counted in minor)
6 semester hours of a foreign language, the high school equivalent, or proven proficiency in a foreign language is required of all students pursuing a TESOL minor. This foundation requirement is not included in the number of credit hours needed for the minor proper. If English is not your native language, you have already fulfilled this requirement.

Required Courses: 21 cr. hrs.
ENGL 302 Theory and Methodology of TESOL 3 cr. hrs.
ENGL 311 Introduction to Language and Linguistics 3 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
ENGL 420 Pedagogical Grammar 3 cr. hrs.
PSYC 315 Psychological Measurement and Evaluation 3 cr. hrs.
Directed Electives: 3 cr. hrs.
ANTH 348 Faces of Culture 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 450 Non-Native Speakers in the Midwest 3 cr. hrs.
ENGL 471 Issues in Bilingualism 3 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SOCI 205 Culture and Personality 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.

TESOL Major - Education: TESOL-Education 36-38 Total Credits
Foreign Language Requirement: 6 cr. hrs.
(credits not counted in major)
6 semester hours of a foreign language, the high school equivalent, or proven proficiency in a foreign language is required of all students pursuing a TESOL major. This foundation requirement is not included in the number of credit hours needed for the major proper. The 6 semester hours are separate from the Cultural Component. A first language used by a major who is a non-native speaker of English to satisfy this language requirement cannot be used as the basis for satisfying the cultural requirement below; study in the English language should be used for such a student or, in the case of fluency in English, the student may request to do the cultural component in a language other than English or the student’s native language. In the case of fluency in both English
and a native language, a student may elect to satisfy this language requirement by a third
language.

Required courses: 21 cr. hrs.
ENGL 302 Theory and Methodology of TESOL 3 cr. hrs.
ENGL 311 Introduction to Language and Linguistics 3 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
ENGL 420 Pedagogical Grammar 3 cr. hrs.
COMD 263 Phonetics 3 cr. hrs.
Directed Electives: 15-17 cr. hrs.
Cultural Component as listed for the Major in TESOL-Liberal Arts. 6-8 cr. hrs.
ANTH 348 Faces of Culture 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 450 Non-Native Speakers in the Midwest 3 cr. hrs.
ENGL 471 Issues in Bilingualism 3 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SOCL 205 Culture and Personality 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.

Required for certification:
TED 428 Techniques of Elementary/Middle/Secondary Education:TESOL 3 cr. hrs.

TESOL Minor - Education: 24 Total Credits

Foreign Language Requirement: 6 cr. hrs.
(credits not counted in minor)
6 semester hours of a foreign language, the high school equivalent, or proven proficiency in a
foreign language is required of all students pursuing a TESOL major. This foundation requirement is
not included in the number of credit hours needed for the major proper. The 6 semester hours are
separate from the Cultural Component. A first language used by a major who is a non-native
speaker of English to satisfy this language requirement cannot be used as the basis for satisfying
the cultural requirement below; study in the English language should be used for such a student or,
in the case of fluency in English, the student may request to do the cultural component in a
language other than English or the student's native language. In the case of fluency in both English
and a native language, a student may elect to satisfy this language requirement by a third
language.

Required Courses: 18 cr. hrs.
ENGL 302 Theory and Methodology of TESOL 3 cr. hrs.
ENGL 311 Introduction to Language and Linguistics 3 cr. hrs.
ENGL 320 Structure of English 3 cr. hrs.
ENGL 322 Acquisition of Language 3 cr. hrs.
ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. hrs.
ENGL 420 Pedagogical Grammar 3 cr. hrs.
Directed Electives: 6 cr. hrs. ANTH 348 Faces of Culture 3 cr. hrs.
ENGL 206 Ethnic Film and Literature 3 cr. hrs.
ENGL 450 Non-Native Speakers in the Midwest 3 cr. hrs.
ENGL 471 Issues in Bilingualism 3 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
SCTA 306 Nonverbal Communication 3 cr. hrs.
SCTA 313 Intercultural Communication 3 cr. hrs.
SOCI 205 Culture and Personality 3 cr. hrs.
TED 461 The Psychology and Pedagogy of Literacy 3 cr. hrs.
Required for certification: TED 428 Techniques of Elementary/Middle/Secondary Education: TESOL 3 cr. hrs.
Theatre
Department of Speech Communication and Theatre Arts
College of Arts and Sciences

B-24 Kleinpell Fine Arts Building
(715) 425-3971

Margaret M. Swanson-Chair, Suzanne Hagen, Robin Murray, James Pratt, Ronald Snell, Kenneth Stofferahn, Richard Vogel, Barbara L. Werner, James Zimmerman

Theatre Minor - Liberal Arts B.S.: 24 Total Credits
Required Courses: 15 cr. hrs.
SCTA 121 Acting I: Basic Techniques 3 cr. hrs.
SCTA 131 Design for the Theatre 3 cr. hrs.
SCTA 335 Directing I 3 cr. hrs.
Choose one from the following:
SCTA 231 Stage Technology and Scene Painting 3 cr. hrs.
SCTA 332 Stage Costuming 3 cr. hrs.
SCTA 333 Stage Lighting 3 cr. hrs.
Choose one from the following:
SCTA 337 History of Theatre, Ancient through Renaissance 3 cr. hrs.
SCTA 338 History of Theatre, 18th Century to Present 3 cr. hrs.
SCTA 339 American Theatre 3 cr. hrs.
Directed Electives: 9 cr. hrs.
SCTA 221 Acting II: Characterization 3 cr. hrs.
SCTA 222 Voice and Articulation 3 cr. hrs.
SCTA 223 Oral Interpretation of Literature 3 cr. hrs.
SCTA 230 Playwrights of Color 3 cr. hrs.
SCTA 231 Stage Technology and Scene Painting (if not chosen under required) 3 cr. hrs.
SCTA 232 Makeup for Theatre, Film, and Video 3 cr. hrs.
SCTA 271 Summer Theatre 1-3 cr. hrs.
SCTA 288 Career Development: Theatre Arts 1 cr. hr.
SCTA 323 Arts Management 3 cr. hrs.
SCTA 327 Children's Theatre and Puppetry 3 cr. hrs.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr. hrs.
SCTA 332 Stage Costuming (if not chosen under required) 3 cr. hrs.
SCTA 333 Stage Lighting (if not chosen under required) 3 cr. hrs.
SCTA 334 Playwriting 3 cr. hrs.
SCTA 336 Costume and Fashion: Mirror of History 3 cr. hrs.
SCTA 375 Theatre Practicum: Production 1 cr. hr.
SCTA 376 Theatre Practicum: Design and Technology 1 cr. hr.
SCTA 435 Directing II 3 cr. hrs.
SCTA 379 Internship in SCTA 3-12 cr. hrs.
SCTA 499 Independent Study/Independent Research 1-3 cr. hrs.

A research/writing course experience is required in the major or another field; SCTA 284 Sophomore Seminar or another course approved by the department chair, will satisfy this requirement. A senior portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio experience is required in the major or another field; SCTA 484, Senior Portfolio Seminar or another course approved by the department chair, will satisfy this requirement.
Women's Studies (WMST)
Interdisciplinary Program

270 Kleinpell Fine Arts Building
(715) 425-4895

Barbara Werner-Coordinator

A minor in Women's Studies presents students with the following: past and present scholarship on women; a methodology which treats the experience of both genders as equal in value and scholarly importance; and opportunities to conduct interdisciplinary research in Women's Studies. The minor consists of a core unit and elective courses, many of which are multidisciplinary.

Women's Studies Minor: 23 Total Credits
Required Courses 6 cr. hrs.
WMST 200 Introduction to Women's Studies 3 cr. hrs.
WMST 480 Seminar: Ethnicity and Gender 3 cr. hrs.
Directed Electives: 17 cr. hrs.
Select at least 6 courses from the following:
WMST 205 Women's History: United States 3 cr. hrs.
WMST 206 Family Communication 3 cr. hrs.
WMST 214 Women in Literature 3 cr. hrs.
WMST 220 Gender Issues in Science 3 cr. hrs.
WMST 221 Global Perspectives on Women 3 cr. hrs.
WMST 235 American Autobiography 3 cr. hrs.
WMST 300 Women and Film 3 cr. hrs.
WMST 303 Women's History: Europe 3 cr. hrs.
WMST 305 Women's History: Global Perspectives 3 cr. hrs.
WMST 314 Women and Politics 3 cr. hrs.
WMST 323 Sociology of the Family 3 cr. hrs.
WMST 326 Sociology of Gender Roles 3 cr. hrs.
WMST 354 Women and the Law 3 cr. hrs.
WMST 379 Internship in Women's Studies 2-3
WMST 389 Topics in Women's Studies .5-3
WMST 440 Gender Communication 3 cr. hrs.
WMST 443 American Ethnic Women Writers 3 cr. hrs.
WMST 499 Directed Studies 1-3
BLAW 389 Special Topics in Business Law: Sexual Harassment and the Law 1 cr. hr.
ECON 312 Political Economy of Discrimination 3 cr. hrs.
HEAL 460 Teaching of Family Life and Sex Education 2 cr. hrs.
PSYC 225 Psychology of Sex Differences 3 cr. hrs.

Double Minor - Women's Studies/Ethnic Studies
It is possible for Arts and Sciences majors to double minor in Women's Studies and Ethnic Studies with minimal additional credits. The double minor is flexible enough for students to graduate on time while supporting virtually any major. By choosing the Women's Studies/Ethnic Studies double minor, students also fulfill 6 hours of the Arts and Sciences Liberal Arts requirements as well as the 3 hour cultural diversity requirement.
Required Courses 9 cr. hrs.
WMST 200 Introduction to Women's Studies 3 cr. hrs.
ETHN 200 Introduction to Ethnic Studies 3 cr. hrs.
ETHN/WMST 480 Seminar: Ethnicity and Gender 3 cr. hrs.
Recommended Courses: 6 cr. hrs.
If students choose not to take recommended courses, they must take one Women Studies elective and one Ethnic Studies-Ethnic Related course for each recommended course not taken. This will increase the total hours required for the double minor.
WMST 235 American Autobiography 3 cr. hrs.
WMST 443 American Ethnic Women Authors 3 cr. hrs.
ECON 312 Political Economy of Discrimination 3 cr. hrs.
Electives: 20 cr. hrs.
WMST 11 cr. hrs. minimum
Specific Ethnic Groups courses 9 cr. hrs. minimum
CSIS 105 2 cr.
Microcomputer Applications
Spreadsheet analysis and database management on the microcomputer will be developed. The use of a word processor to enhance reports generated from the above applications will also be developed. Applications to business, agriculture, education and personal use will be emphasized. Prerequisite: MATH 146 or equivalent. (F,Sp)

CSIS 151 3 cr.
Introduction to Programming
This is an introduction to the use of the computer as a problem-solving tool. Algorithmic design and development, object oriented programming, and applications will be emphasized. This course presupposes no prior experience in computer programming. Prerequisite: MATH 030 or three years high school math. (Sp)

CSIS 161 3 cr.
Programming I
An introduction to fundamental computer concepts and Object Oriented Programming. Java will be used to teach the basic concepts of program analysis, design and implementation. Topics include: Object Oriented Programming, Applets, Applications, Classes, Objects, Methods, Data Types, Conditional Execution and Loops. Prerequisite: Math 146 (F; S)

CSIS 162 3 cr.
Programming II
A continuation of fundamental computer concepts and Object Oriented Programming. Java will be used to teach the basic concepts of program analysis, design and implementation. Topics include: Arrays, Search, Sort, File IO, Exceptions, Packages, Event Driven Programming, GUI Objects, Inheritance, Polymorphism and Recursion. Prerequisite: CS161 (F,S)

CSIS 215 3 cr.
Information Systems for Business Management
A study of the use of information systems to assist management in planning, directing, and controlling the activities of an organization. The use of computer resources in providing useful information for each of the functional areas of business is explored. Prerequisite: MNGT 100 or Consent of CSIS Chair (F, S)

CSIS 225 3 cr.
Web Development I
This course teaches students how to create web pages with HTML and DHTML. The course covers the basics to more advanced HTML/DHTML and web page creation skills. Topics range from creating and designing a web page to JavaScript and adding multimedia to a web page. Prerequisite: CSIS 161 or MNGT 265. (SS)

CSIS 237 3 cr.
Data Structures and Algorithms
An introduction to the basic data structures and algorithms. Topics include: linked lists, stacks, queues, trees, graphs, sorting, and data compression. Prerequisite: CSIS 162. (F,SP)

CSIS 247 3 cr.
Introduction to Computer Networks
This is an introductory course to computer networks. Students will become comfortable with the concepts and vocabulary of computer networking and will gain hands-on experience in basic networking technology. Topics include: Network hardware, communication protocols, design and configuration of computer networks and network security. The course also includes a lab component on installation, setup and administration of network operating systems. Prerequisite: CSIS162 (F, S)

CSIS 279 1 cr.
Internship I
A computer systems-related work experience such as tutoring, grading papers or serving as a laboratory assistant. In addition, students will be expected to attend seminars on job skills and to assist in projects proposed by their on-site supervisor. This course is intended to help prepare students for CSIS 379. Prerequisites: CSIS 162; sophomore standing; GPA of 3.0 or higher; permission of Computer Systems Department Internship Supervisor. (F,Sp)

CSIS 289 1-3cr.
Independent Studies
For students who wish to work independently on a topic or problem in a computer science related area. Prerequisite: Sophomore Standing. Offered (F, S, SS)

CSIS 301/501 2 cr.
**Computers and Modern Society**
This is the writing intensive course for the Computer Systems Education Option. Discussion of the issues confronting society and our relation with the computer including communication, technology, artificial intelligence, ethical and moral issues; and the social, economic and cultural impact. (Sp)

CSIS 311 3 cr.
**Theory of Computing**
The mathematical logicians of the 1930s prepared the foundations of computer science. This course studies those results in a modern setting. Topics include automata, formal languages, computability and decidability. Co-listed as MATH 311. Prerequisite: CSIS 236 (May be taken concurrently) or MATH 166. Familiarity with at least one programming language. (Sp, odd years)

CSIS 317 3 cr.
**Compilers**
A formal treatment of programming language translation and compiler design. Included are theoretical aspects of lexical analysis, parsing context - free languages, and translation specifications. Prerequisite: CSIS 241, 311. (F, even years)

CSIS 323 3 cr.
**Structured COBOL Programming**
An introduction to programming in COBOL with a strong emphasis on achieving structured design and programming. Programming concepts covered include report production, tables, file structures and processing, subprograms, interactive programming, sort/merge and report writer features. Projects will involve business applications. Prerequisite: CSIS 162. (Sp)

CSIS 325 3 cr.
**Web Development II**
This course teaches students how to create dynamic Web Applications using both client-side and server-side scripting technologies. Students will learn both JavaScript and VBScript to create client-side scripts. ASP (Active Server Pages) will also be covered. Prerequisite: CSIS 225 (SS)

CSIS 328 3 cr.
**C++ Programming**
An Introduction to different facets of the C++ Programming language. Concepts covered include Arrays, Pointers, Classes, Inheritance, Operators Overloading, Polymorphism, Templates, and Exception Handling. Prerequisite: CSIS 162 (S, SS)

CSIS 333 3 cr.
**Database Management Systems**
Introduction to database systems, database administration and database design concepts, relational model and relational database systems are further examined through class projects. Security, privacy, concurrency control, distributed databases, object-oriented database, and client/server systems will be examined. Prerequisite: CSIS 235. (F)

CSIS 337/537 3 cr.
**Computer Graphics**
Basic concepts and algorithms used in the development of computer graphics software will be discussed. Techniques for two and three-dimensional transformations will be studied. Current graphics input/output devices will be reviewed. Graphics software will be developed by the student. Prerequisite: CSIS 236. (F, odd years)

CSIS 343 3 cr.
**Software Engineering**
This course provides an overview of the process involved in software projects: requirements analysis, design methods, programming languages, coding practices, software testing, documentation, and maintenance. Students will work on a team software project. Prerequisites: CS 237; (F)

CSIS 346 3 cr.
**Numerical Analysis I**
This course is an introduction to the numerical algorithms fundamental to analysis and includes solution to equations by fixed-point iteration, the Newton-Raphson method, error analysis, polynomial interpolation, numerical differentiation and integration, direct methods for solving linear equations and approximation theory. Co-listed as MATH 346. Prerequisites: MATH 167 and capability in a programming language. (F)

CSIS 347 3 cr.
Numerical Analysis II
This is a continuation of the study of numerical methods. Techniques to solve ordinary and partial differential equations, boundary-value problems and nonlinear systems of equations will be examined. These will include finite-element and finite-difference methods. Integral equations and signal processing with fast algorithms will be considered. Co-listed as MATH 347. Prerequisite: CSIS 346. (Sp, odd years.)

CSIS 355 3 cr.
Computer Organization and Assembly Language
This course will provide an introduction to the basic principles of digital hardware and assembly language programming. Topics include: Combinational Circuits, Sequential Circuits, Memory Units (ROM/RAM) and their Basic Architecture, Central Processing Unit and its Architecture, Machine Language, Microcomputer Architecture, Memory Architectures, Addressing Modes, Data Transfer Instructions, Arithmetic Instructions, Assembler Expressions, Input/output Services, Transfer of Control Instructions, subroutines and macros. Prerequisite. CSIS237 (F; S)

CSIS 360/560 3 cr.
LOGO for Teachers
This course will provide an introduction to microcomputers, via the programming language LOGO, giving teachers the necessary background for teaching LOGO themselves. The concepts of "turtle graphics," "procedures," and editing will be introduced. More advanced features will also be discussed, along with some general material relating to the educational implications of learning to program in LOGO. (F, even years)

CSIS 378/578 3-6 cr.
Semester Abroad Research
The research component of the Semester Abroad program. A semester of directed research in a European country. Taken in conjunction with International Studies 377/577. Prerequisites: participation in the Spring Semester Abroad orientation seminar; 2.25 GPA; junior or senior standing. (F)

CSIS 379 3-12 cr.
Internship Computer Science
A temporary paid job (usually lasting for one semester or summer) providing pre-professional experience in an off-campus business or institution. The job must provide practical applications of computer-related skills and personal growth in these skills. Selected students will be matched with sponsoring organizations and a job description and evaluation method will be negotiated for each opportunity. The number of credit hours depends on the number of hours of employment. Prerequisites: CSIS 236, 241, and at least one 300-level Computer Systems course; 60 or more credit hours with a GPA of 3.0 or better; permission of Computer Systems Internship Supervisor; permission of Computer Systems Department Chair. (F,Sp,SS)

CSIS 416 3 cr.
Structure of Programming Languages
An exploration of the fundamental ideas underlying programming languages. The abstract features of procedural, functional, logical and object-oriented languages are examined. The implementation of these features in specific languages is studied. Prerequisite: CSIS 361. (F)

CSIS 423 3 cr.
Introduction to Systems Analysis
This course integrates the areas of computer technology, system analysis, system design and organizational behavior. Functions of the system analyst will be investigated including steps and tools used in the analysis and design of Information Systems. Topics include: development tools, system planning and alternatives, feasibility analysis, and selection strategies. Prerequisite: CSIS 333 (may be taken concurrently). (F)

CSIS 429 3 cr.
Operating Systems
This course introduces the concepts of operating system implementation and techniques to use operating systems functions in programs. Students will learn systems programming using the C language in Unix, Linux, and flavors of Windows operating systems. Students will also look at implementations of processes, synchronization and deadlocks, memory management, and file systems. Prerequisites: CS 355; (S)

CSIS 433 3 cr.
Design Analysis MIS
A continuation of the study of system analysis and design. A physical design will be constructed based on the logical design developed in CSIS 423. Topics include: database interface, development of implementation plan, and selection of hardware and software. Prerequisites: CSIS 333 and 423. (Sp)

CSIS 441 3 cr.
Advance Computer Networks
This is an advanced course on computer networks. Students will learn the theoretical and technical aspects of computer networks. Topics include: Signals, Encoding and Decoding, Transmission of Digital Data, Transmission Media, Multiplexing, Error Detection and Correction, Data Link Control, Data Link Protocols, Switching, Point-to-Point Protocols, Networking and Internetworking Devices, Transport Layer and TCP/IP Protocol Suite. CSIS247 (S)

CSIS 451 3 cr.
Artificial Intelligence
This is an introductory course in the field of Artificial Intelligence. Topics include: Rule-based Expert Systems, Uncertainty Management, Fuzzy Logic, Fuzzy Inference Systems, Artificial Neural Networks and Evolutionary Programming. CSIS237 (F)

CSIS 460/660 3 cr.
Integrating Technology in Teaching Mathematics
A course for pre-service and in-service secondary school teachers interested in utilizing current technologies in the mathematics classroom. Computer systems, graphing calculators, and imaging technologies will be utilized to enhance the teaching of mathematics. Impact of such technologies on the mathematics curriculum and on evaluation will be studied. New curriculum materials will be developed by the class. Prerequisite: CSIS 151 or CSIS 161 or CSIS 360 or Math 205 or consent of instructor. (Sp)

CSIS 484 1 cr. hr.
Seminar
This is the "writing intensive" course for all CSIS options. A seminar on advanced topics in computer systems. Students will research a topic and give an oral presentation along with a written report. Additional faculty and guest lectures on various areas not covered in other courses are included. Prerequisite: Senior Standing. (F,Sp)

CSIS 489/689 .5-3 cr.
Special Topics: Computer Science
This course is an extension of current higher level computer science courses or a course in recent topics and advanced areas in computer science. The topics covered will be determined by the instructor teaching the course and within the instructor's area of expertise. Consult the instructor for topics covered. Prerequisites: junior or senior standing and consent of instructor. (Sp)

CSIS 499 1-3 cr.
Independent Studies
A course for upperclassmen who wish to work independently on a topic or problem in a computer science related area. A paper describing the project is required. Prerequisite: consent of instructor. (F,Sp,SS)