# **General Education Program**

# UWRF General Education Mission Statement:

The purpose of the UWRF General Education program is to facilitate the acquisition and integration of knowledge, abilities, and ethics in order to form a foundation for lifelong learning.

The interdisciplinary foundation includes the ability to communicate effectively; comprehend the inter-relatedness of past and present human experience; apply scientific principles to the human and natural world; engage in inquiry and critical thinking; develop and appreciate the responsibilities of individuals to themselves, each other, society, and the world.

While outcomes in this document do not specify essential content, it is understood that individual departments and faculty will determine what that essential content is in the course designated as fulfilling general education objectives. All courses with a General Education designation will include, to the extent possible, critical thinking, written composition, oral discussion, and graphic components.

To accomplish this mission there are five goals with one to three designators to each of the goals, with a certain number of credits attached. The goals are outlined below with the approved courses. The total number of credits needed to complete the general education program is 38.

# Approved Courses:

# GOAL ONE: COMMUNICATE EFFECTIVELY: Students will demonstrate the ability to read, write, speak, and listen effectively.

## CW (Communication - Reading and Writing) - select one course

- \* ENGL 100-Academic Reading and Writing (3)
- \* ENGL 101-Freshman English for International Students I (3)

## CS (Communication – Speaking and Listening) – select one course

- \* CHIN 101-Beginning Chinese I (4)
- \* FREN 101-Beginning French I (4)
- \* GERM 101-Beginning German I (4)
- \* JAPN 101-Beginning Japanese I (4)
- \* SPAN 101-Beginning Spanish I (4)
- \* SCTA 101-Fundamentals of Oral Communication (3)
- \* SCTA 116-Business and Professional Communication (3)

### CA (Advanced Communication) – select one course

- \* ENGL 200-Investigating Ideas: Reading, Writing, & the Disciplines (3)
- \* ENGL 201-Freshman English for Internation Students II (3)

# GOAL TWO: DEMONSTRATE KNOWLEDGE OF PAST AND PRESENT HUMAN ENDEAVOR: Describe the diverse ways of thinking that underlie the search for knowledge in the arts, humanities, and social sciences.

# SB (Social and Behavioral Sciences) – select two courses (Courses taken under both SB and HF designators must be from different disciplinary prefixes)

- \* ANTH 100-Introduction to Anthropology (3)
- \* ECON 100-Modern Economics (3)
- \* ECON 150-International Economics Issues (3)
- \* GEOG 120-Human Geography (3)
- \* HIST 100-Defining Theses in U.S. History (3)
- \* HIST 101-Origins of Civilization (3)

- \* HIST 102-Origins of One World (3)
- \* HIST 201-Introduction to Asian Civilization (3)
- \* MNGT 250-Global Business & Society (3)
- \* POLS 114-American National, State, and Local Governments (3)
- \* POLS 245-Introduction to Comparative Politics (3)
- \* POLS 260-Introduction to International Relations (3)
- \* PSYC 101-General Psychology (3)
- \* SOCI 100-Introduction to Sociology (3)

# HF (Humanities and Fine Arts) – select two courses (Courses taken under both SB and HF designators must be from different disciplinary prefixes)

- \* ART 100-Introduction to Art (3)
- \* ENGL 241-Human Issues in Literature (3)
- \* ENGL 243-Types of Literature (3)
- \* DANC 100-History/Appreciation of Dance (3)
- \* MUS 100-Understanding Music (3)
- \* PHIL 151-Living Issues in Philosophy (3)
- \* PHIL 201-Human Nature, Ethics and the Natural World (3)
- \* PHIL 221-Ancient Philosophy (3)
- \* PHIL 240-Social Ethics (3)
- \* PHIL/ART 310-Philosophy and History of Visual Art (3)
- \* PHIL 323-Science & the Philosophers of the Age of the Enlightenment (3)
- \* SCTA 105-Introduction to Theater and Drama (3)
- \* SCTA/FILM 200-Introduction to Film Studies (3)

# GOAL THREE: APPLY SCIENTIFIC PRINCIPLES TO THE NATURAL WORLD: Students will demonstrate knowledge of the principles and methods of quantitative and qualitative scientific reasoning.

### M (Mathematics) - select one course

- \* MATH 126-Activities in Math (3)
- \* MATH 146-College Algebra (3)
- \* MATH 147-Algebra and Trigonometry (3)
- \* MATH 149-Pre-Calculus (4)
- \* MATH 156-Calculus for Business (3)
- \* MATH 166-Calculus for Science and Math (4)
- \* MATH 216-Elementary Statistical Concepts (3)
- \* MATH 226-Fundamentals of Statistics (3)
- \* MATH 246-Math for Elementary Teachers I (4)
- \* PSYC 201-Behavioral Statistics (3)

SL (Scientific Investigation) – select one course (but can take two courses and skip S) (The courses taken under the SL and S designators must be from different disciplinary prefixes)

- \* BIOL 100-Introduction to Biology (3)
- \* BIOL 150-General Biology (3)
- \* CHEM 101-Elementary Principles of Chemistry (3)
- \* CHEM 120-Introduction to General Chemistry (6)
- \* CHEM 121-General Chemistry I (5)
- \* GEOL 102\*-Intro to Geology, Laboratory (1)
- \* GEOL 202-Oceanography (3)
- \* PHYS 101\*-General Physics Laboratory I (1)
- \* PHYS 156\*-General Physics Laboratory I (1)

\*these classes must be taken with the corresponding lecture class and change the designator from S to SL

S (Sciences) – select at least one course (if only taking one SL course) (The courses taken under the SL and S designators must be from different disciplinary prefixes)

- \* BIOL 101-Concepts in Biology (3)
- \* CHEM 100-Modern Alchemy (3)
- \* FDSC 110-The Science of Food (3)
- \* GEOG 110-Physical Environment: Patterns and Systems (3)
- \* GEOL 101-Introduction to Geology (3)
- \* PHYS 114-Basic Physics (3)
- \* PHYS 117-Astronomy (3)
- \* PHYS 151-General Physics I (4)
- \* PHYS 161-General Physics I (4)

# GOAL FOUR: ENGAGE IN MULTIDISCIPLNARY INQUIRY: Students will analyze questions and issues from multidisciplinary perspectives.

### MD (Multidisciplinary Inquiry) - select one course

- \* AFES 492-Experiential Learning in Agriculture (3)
- \* ENGL/HIST/GEOG 385-Interdisciplinary Seminar on the American Frontier (3)
- \* FILM/HIST 402-History in Film (3)
- \* HUM 300-Multidisciplinary Human Perspectives (3)
- \* HUM 311-Arts & Ideas I (4)
- \* HUM 312-Arts & Ideas II (4)
- \* INTS 365-Contemporary Europe (3)
- \* PHIL/ART 310-Philosophy and History of Visual Art (3)
- \* PHIL 323-Science & the Philosophers of the Age of the Enlightenment (3)
- \* PHYS/ECON 360-Science, Technology, Society, and the Work Place (3)

# GOAL FIVE: EVALUATE INDIVIDUAL RESPONSIBILITY TO SELF, SOCIETY, AND THE WORLD: Students will make and defend judgments with respect to individual conduct and well being, citizenship, and stewardship of the environment.

### HW (Personal Health and Wellness) - select 3 courses

- \* P ED 108-Health and Fitness for Life (required) (1)
- \* PE-2 activity courses (select two activity courses) (.5 credit)

### EC (Ethical Citizenship) – select one course

- \* CROP 120-Plants and Society (3)
- \* ENGL 228-Literature of Environmental Justice (3)
- \* ENGL 374-Cyberliteracy and Writing on the Web (3)
- \* ESM 105-Introduction to Environmental Studies (3)
- \* FINC 210-Personal Finance (3)
- \* GEOL 269-Environmental Geology (3)
- \* JOUR 101-Introduction to Mass Communication (3)
- \* MNGT 250-Global Business & Society (3)
- \* PHIL 201-Human Nature, Ethics and the Natural World (3)
- \* PHIL 304-Business Ethics (3)
- \* POLS 230-Contemporary Ideologies (3)
- \* SOWK 150-Introduction to Social Work (3)

For additional information regarding the General Education program and the approval process : www.uwrf.edu/faculty\_senate/gened/General\_Education.htm

# UNIVERSITY REQUIREMENTS

ACD (American Cultural Diversity) – select one course (can be double counted anywhere in your degree program)

ANTH/SOCI 225 Sociology of Race and Ethnicity (3)

ECON 312 Political Economy of Diversity (3)

ENGL 203 Literature of the African American Experience (3)

ENGL/FILM 206 Ethnic Film and Literature (3)

ENGL 208 Literature of the Native American Experience (3)

ENGL/WMST 235 American Autobiography: Varieties of Personal Narrative (3)

ENGL 212 The Native American in Literature (3)

ENGL/WMST 443 American Ethnic Women Writers (3)

ETHN 200 Introduction to Ethnic Studies (3)

GEOG 237 Poverty in the United States (3)

HIST 206 Native American and the United States (3)

HIST 207 African American History (3)

- MNGT 330 Managing Workplace Diversity (3)
- POLS 212 The Politics of Equality and Inequality in the United States (3)
- PSYC 285 Psychology of Prejudice and Racism (3)
- SCTA 230 Playwrights of Color (3)
- SOCI 208 Sociology of Diversity (3)
- TED 252 Foundations of Multicultural Education (3)

# GP (Global Perspectives) – select one course (can be double counted any where in your degree program)

AGEC 250 World Food and Population (3)

ECON 340 Contemporary International Trade (3)

GEOG 344 Asia and Oceania (3)

ENGL/FILM/INTS 442 World Cinema (3)

HIST 201 Intro to Asian Civilization (3)

HIST 202 Introduction to Latin American Civilizations (3)

HIST 203 The Mediterranean: A Survey (3)

INTS 365 Contemporary Europe (3)

MNGT 355 International Business (3)

MODL 376 Mexico: A Cultural Experience (3)

MUS 300 World Music (3)

PHIL 245 Eastern Religions and Islam (3)

POLS 245 Introduction to Comparative Politics (3)

- POLS 260 Introduction to International Relations (3)
- Note: These two University Requirements need to be completed in any degree program and are not General Education requirements.

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# **College of Agriculture, Food and Environmental Sciences**

210 Agricultural Science Building (715) 425-3784 (715) 425-3785 FAX www.uwrf.edu/college-of-agriculture

The College of Agriculture, Food and Environmental Sciences (CAFES) represents the standard of excellence in undergraduate teaching and learning for agriculture, food, fiber, and the environment. Since 1912, students have been learning from dedicated teachers in classrooms, laboratories, and through extra-curricular activities. The contemporary and challenging undergraduate education and related programs lead to outstanding career opportunities for CAFES graduates. CAFES serves the people of Wisconsin, the region, and the world.

The college has over 50 highly qualified instructional and support personnel. Almost all faculty hold a Ph.D. in their area of specialization. CAFES is strongly committed to teaching and learning with a low students-to-faculty ratio. Many CAFES faculty have received public recognition for outstanding teaching.

There are five administrative departments responsible for most of the academic programs: Agricultural Economics, Agricultural Education, Agricultural Engineering Technology, Animal and Food Science, and Plant and Earth Science.

CAFES has excellent teaching facilities and well-equipped laboratories:

Animal Science Laboratories Biochemistry and Microbiology Laboratories Colt Training Facilities and Barn Computer Aided Drafting Laboratories Crops and Soil Science Laboratories Engineering Technology Laboratories Food Processing Plants Geology Laboratories Greenhouses Outdoor Plant Teaching Laboratory Resource Management Laboratories

CAFES operates two laboratory farm sites providing vital resources for teaching, extension and research. The farms support beef, dairy, horse, sheep, swine, cropping, horticulture and forestry enterprises. Students have the opportunity to work on the farm, and student managers run several of the enterprises. The Dairy Learning Center will open in fall 2007. This is a 10-building complex featuring a composted bedding system, a Bou-Matic double-6 herringbone parlor, pasture and confinement-based management systems, and flexible classroom space. 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 AND FOOD SCIENCE

Animal Science (Meat Animal Science and Equine Science Emphases) Dairy Science (Management and Science Options) Food Science & Technology (Industry, Dairy Technology and Science Options)

## PLANT AND EARTH SCIENCE

Conservation

Crop and Soil Science (Crop Science Option, Soil Science Option, Sustainable Agriculture Option) Geology (Bachelor of Science Program in Geology, 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 or emphases 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 combine classroom learning with planned and supervised field experiences through the Internship program. 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 16week 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.

## **Interdepartmental Courses**

AGED 140 Orientation to College, 2 cr. AGED 260 Professional Careers in Agriculture, 2 cr. Courses listed in each college program area: 270 Internship I, 2-4 cr. 271 International Internship, 4 cr. 370 Internship II, 2-4 cr. Bachelor of Science Degree

# Requirements for CAFES Departmental Majors 120 Total Credits

## A. General Education 41-43 cr. hrs.

## B. Foundation Courses in Agriculture 12-18 cr. hrs.

AGEC 230 3 cr. AGEN 150 3 cr. CROP 161 or HORT 161 3 cr. ANSC 111 3 cr. FDSC 112 3 cr. SOIL 210 3 cr.

## C. Major Concentration 59-64 cr. hrs.

Required courses and electives as required by the departmental major.

# Agricultural Studies Major

The Agricultural Studies major enables the student to gain a breadth of knowledge about many areas within the field of agriculture, food and environmental science. A relatively large course elective component allows students to be flexible in meeting individual needs. For example, students may elect courses in agricultural communications under this major.

# 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 two-year course of study, all of the courses in the program are selected from the four-year 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 two-year program.

# Two-year program requirements 60 Total Credits

# A. General Education 25 Credits

ENGL 100, 200 6 cr. SCTA 101 or 116 3 cr. BIOL 150 or 100 3 cr. CHEM 121 (or 120 may substitute for CHEM 121 with Dean's Approval) 5-6 cr. ESM 105 3 cr. MATH 146 3 cr. P ED 108 1 cr. P E (Select two .5 cr. activities courses) 1 cr.

## 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. Select three of the following courses in AGEC: 345, 360, 365, 368, 468 9 cr. Ag Sciences electives 12-13 cr. hrs. 2. Agricultural Communications AGED 110, 202, 230, 260 15 cr. JOUR 112 3 cr. SCTA 116 3 cr. CPTS 105 2 cr. ENGL 367 3 cr. Ag Sciences electives 4-5 3. Agricultural Engineering Technology AGEN 150, GENG 121, 235 8 cr. Select three: AGEN or GENG 100 or 200 level courses 7 cr. Select three: AGEN or GENG 300 or 400 level courses 8-9 cr. Ag Sciences electives 6-7 cr. hrs. 4. Agronomy CROP 161, 260, 263, 266, 345 14 cr. SOIL 210, 311 7 cr. AGEC 230 3 cr. Ag Science electives 6-7 cr.

5. Dairy Science ANSC 111, 231, 232, 257, 345 14 cr. DASC 120, 306 4 cr. Ag Sciences electives 12 cr. hrs. 6. Farm Management AGEC 230, 305, 360 9 cr. Select 2: AGEC 345, 355, 365 6 cr. ANSC 231 3 cr. CROP 161 3 cr. SOIL 210 3 cr. Ag Sciences electives 6-7 cr. hrs. 7. Food Science FDSC 112, 113, 312, 313, 335 17 cr. FDSC electives 6 cr. hrs. BIOL 324 4 cr. Ag Sciences or Business electives 5-6 cr. hrs. 8. Horse Science ANSC 111, 167, 168, 231, 232, 369, 257 18 cr. Select 1: ANSC 261 or 268 3 cr. Agricultural Sciences electives 8-9 cr. 9. Horticulture AGRON/HORT 161 3 cr. HORT 169, 200, 310, 327 or 347, 352 16 cr. BIOL 314, SOIL 210 6 cr. Directed electives 5-6 cr. 10. Meat Animal Science ANSC 111, 140, 231, 232, 257 15 cr. Select 2: ANSC 365, 366, 367, 368 6 cr. Agricultural Sciences electives 9 cr. 11. Soil Science SOIL 210, 311, 350, 440 15 cr. CROP 161, 263, 264, 345 12 cr. GEOL 101,102 4 cr. Ag Sciences electives 0 cr.

### C. Free electives 4-5 cr. hrs.

Updated April, 2007

# College of Arts and Sciences

# 136 Kleinpell Fine Arts (715) 425-3777 or 3366 (715) 425-3367 FAX http://www.uwrf.edu/cas/

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. As changes in program offerings take place, 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, 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, teaching English as a second language (TESOL), and theatre arts. 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: 38 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: 14-17 cr. hrs.** (see test-out rules) This requirement can be met by satisfying one of the following guidelines:

Two years of one foreign language taught at UWRF 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, 349, 371; HUM 261; INTS 200; MODL<sup>\*</sup>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.

# Bachelor of Science

### General Education 38 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) Requirements vary according to program.

### Liberal Arts 3 courses: minimum of 8 credits

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.

Students must take courses from at least 2 divisions. (The divisions are: Humanities/Fine Arts; Modern Languages; Sciences/Mathematics; Social Sciences.) Students may take 1 course in division of either major or minor, but course cannot be in either the major or minor designator area. (e.g., a Psychology major/Sociology minor could take a History course for Liberal Arts, but could not take either a PSYC or SOCI designated course to fulfill this requirement). Students in multidisciplinary programs (e.g., Marketing Communications) should follow liberal arts policy of that degree.

# University Requirements (American Cultural Diversity and Global Perspectives): 6 cr. hrs.

Students must take both an American Cultural Diversity (ACD) and a Global Perspectives (GP) course. Liberal Arts courses with ACD designation double count toward both the Liberal Arts and the American Cultural Diversity requirements. Liberal Arts courses with GP designation double count toward both the Liberal Arts and the Global Perspectives requirements.

### 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.

### TOTAL 120 cr. hrs.

# Liberal Arts Courses

These courses meet the Liberal Arts requirements prescribed in the preceding degree programs. The Liberal Arts Courses link provides a PDF file with the latest listing.

## **HUMANITIES DIVISION:**

### Art (ART)

211-Western Art to 1500, 212-Art History Since 1500, 226-Introduction to Fibers, 227-Introduction to Clay, 228-Introduction to Metal, 229-Introduction to Glass, 235-Introduction to Black and White Photography, 236-Introduction to Printmaking, 237-Introduction to Sculpture, 238-Introduction to Painting, 311-American Art to 1865, 312-American Art since 1865, 314-Art of China, India, and Japan, 318 -Latin American Art

### English (ENGL)

202-Literature of Science Fiction, 203-Literature of the African-American Experience, 206-Ethnic Film and Literature, 207 -Literature of the Asian-American Experience, 208-Literature of the Native American Experience, 212-The Native American in Literature, 214-Women in Literature, 222-Literature of Fantasy, 226-Detective Fiction, 228-Literature of Environmental Justice, 231-The Short Story, 232-Contemporary Drama, 233-Introduction to Poetry, 234-Modern Novels, 235-American Autobiography: Varieties of Personal Narrative, 237-Introduction to Greek Mythology, 250-Literature for Children, 253-Introduction to Literary Studies, 300-Women and Film, 301-History of Film, 321-The English Language: History and Culture, 322-Acquistion of Language, 324-Survey of American Literature I: Origins to 1900, 325-Survey of American Literature II: 1900-1980, 331-Survey of English Literature I: to 1800, 332-Survey of English Literature II, 335-Shakespeare, 341-European Literature, 342-Developments in the Novel, 343-The Novel and Film Adaptations, 344-Major Authors, 350-Children, s Literature: Issues and Trends, 355-Literature for Adolescents, 376-Experience Greece: Culture Past and Present, 385-Interdisciplinary Seminar on the American Frontier, 421-Chaucer, 422-Renaissance Drama, 423-Seventeenth Century Prose and Poetry to the Restoration, 424-Drama and Novels of the Restoration and 18th Century, 425-Romantic British Literature, 426-Victorian Literature, 427-Modern British Literature, 1890-1940, 428-Modern British Literature, 1940present, 429-American Renaissance, 430-American Realism, 431-Modern American Fiction, 432-Contemporary American Literature, 441-Twentieth-Century International Literature, 442-World Cinema, 443-American Ethnic Women Writers, 455-Adolescent Literature: Issues and Trends

## Ethnic Studies (ETHN)

200-Introduction to Ethnic Studies

## Film Studies (FILM)

200-Introduction to Film Studies, 206-Ethnic Film and Literature, 248-Film-Cultures in Conflict, 289-Topics in Film, 300-Women and Film, 301-History of Film, 302-History of Documentary, 315-German Classic and Modern Film, 343-The Novel and Film Adaptations, 389-Special Topics, 442-World Cinema

## Humanities (HUM)

300-Multidisciplinary Human Perspectives, 311-Arts and Ideas I, 312-Arts and Ideas II

## Humanities (IHUM)

489-Humanities Capstone

## **International Studies (INTS)**

200-Introduction to International Studies, 365-Contemporary Europe, 442-World Cinema

## Journalism (JOUR)

240-Introduction to Visual Communication, 301-History of Film, 455-Mass Media and Society

## Music (MUS)

200-American Music, 234-Music History and Literature I, 235-Music History and Literature II, 255-History of Jazz, 300-World Music

## Philosophy (PHIL)

201-Human Nature, Ethics, and the Natural World, 221-Ancient Philosophy, 222-Hellenistic & Medieval Philosophy, 224 Existentialism and Late Modern Philosophy, 230-Logical Reasoning, 232-Biblical & Philosophical Approaches to Contemporary Issues, 235-Philosophy of the Arts, 240-Social Ethics, 245-Eastern Religions and Islam, 265-God, Religion, Science & the Meaning of Life, 289-Special Topics in Philosophy, 303-Environmental Ethics, 304-Business Ethics, 307-Greece to the Middle Ages, 308-Renaissance to Marx, 309-Western Political Thought: Nietzsche to the Present, 310-Philosophy and History of Visual Art, 311-Philosophy of Law, 316-Media Ethics, 323-Science & the Philosophers of the Age of Enlightenment, 369-American Intellectual History, 389-Special Topics in Philosophy, 415-History of Philosophy

## Speech Communication and Theatre Arts (SCTA)

200-Introduction to Film Studies, 206-Family Communications, 207-Listening Skills, 223-Oral Interpretation of Literature, 230-Playwrights of Color, 248-Film-Cultures in Conflict, 301-History of Film, 314-Introduction to Criticism for Oral Communication, 334-Playwriting, 336-Costume and Fashion: The Mirror of History, 337 -History of Theatre and Dramatic Literature: Ancient Traditions Through Renaissance Drama, 338-History of Theatre and Dramatic Literature: 18th Century to the Present, 339-American Theatre, 353-Mass Media and Popular Culture, 440-Gender Communication

### Women's Studies (WMST)

214-Women in Literature, 235-American Autobiography: Varieties of Personal Narrative, 300-Women and Film, 389-Topics in Women,s Studies, 440-Gender Communication, 443-American Ethnic Women Writers

## **MODERN LANGUAGE DIVISION:**

### **Communicative Disorders (COMD)**

162-Introduction to American Sign Language, 469-American Sign Language

## Modern Language (MODL)

376-Mexico: A Cultural Experience, 377-Foreign Study, 379-Internship in Modern Language, 499-Independent Study in Modern Language

## Chinese (CHIN)

101-Beginning Chinese I, 102-Beginning Chinese II, 490-Readings in Chinese

## French (FREN)

101-Beginning French I, 102-Beginning French II, 201-Intermediate French I, 202-Intermediate French II, 301-French Conversation and Composition I, 302-French Conversation and Composition II, 341-French Civilization, 342-Modern France and Francophone Cultures, 351-Survey of French Literature to 1800, 352-Survey of French Literature 1800- Present, 378-Semester Abroad Research, 401-Advanced French Communications, 451-French Prose Fiction, 452-French Poetry, 453-French Drama, 490-Readings in French

### German (GERM)

101-Beginning German I, 102-Beginning German II, 201-Intermediate German I, 202-Intermediate German II, 275-Business German, 301-German Conversation and Composition I, 302-German Conversation and Composition II, 315-German Classic and Modern Film, 341-German Civilization, 342-Modern German-Speaking Cultures, 351-Survey of German Literature to Classicism (1800), 352-Survey of German Literature to Classicism (1800), 352-Survey of German Literature to Classicism (1800) to the Present, 378-Semester Abroad Research, 401-Advanced German Conversation, 451-German Drama and Theatre, 452-German Tale, Short Story, and Novella, 453-German Poetry, 490-Readings in German

### Japanese (JAPN)

101-Beginning Japanese I, 102-Beginning Japanese II, 201-Intermediate Japanese I, 202-Intermediate Japanese II

### Spanish (SPAN)

101-Beginning Spanish I, 102-Beginning Spanish II, 201-Intermediate Spanish I, 202-Intermediate Spanish II, 301-Spanish Composition and Conversation I, 302-Spanish Composition and Conversation II, 341-Spanish Civilization to 1800, 342-Spanish Civilization 1800-Present, 345-Latin American Civilization to 1800, 346-Latin American Civilization 1800- Present, 351-Survey of Spanish Literature- Siglo De Oro (Golden Age), 352-Survey of Spanish Literature- Generation of 1898 to Present, 355-Survey of Latin American Literature- Conquest to Independence, 356-Survey of Latin American Literature-Independence to Present, 378-Semester Abroad Research, 401-Advanced Spanish Communication, 452-Advanced Spanish Literature, 455-Advanced Latin American Literature, 490-Readings in Spanish

# NATURAL SCIENCES AND MATHEMATICS DIVISION:

### **Biology (BIOL)**

210-General Botany, 230-General Zoology, 253-Human Biology, 307-Human Heredity: Principles and Implications, 344-Wildlife Biology

### Chemistry (CHEM)

200-Chemistry and the Environment, 210-Topics in Consumer Chemistry, 220-Chemistry of Life

### Geography (GEOG)

316-The Physical Environment of Urban Areas

### Geology (GEOL)

202-Oceanography, 269-Environmental Geology, 305-Geology of the Planets, 330-Meteorology

### Mathematics (MATH)

216-Elementary Statistical Concepts, 361-Symbolic Logic

**Physics (PHYS)** 220-The Science of Light, 318-Astrophysics, 321-The Science of Sound

Science (ISCI) 497-Science Capstone

### SOCIAL AND BEHAVIORAL SCIENCES DIVISION:

Accounting (ACCT) 201-Survey of Accounting

### Anthropology (ANTH)

205-Culture and Personality, 221-Global Perspectives on Women, 225-Sociology of Race and Ethnicity, 228-Native American Cultures, 247-Human and Cultural Origins, 338-Global Perspectives on Health and Disease, 348-Faces of Culture

### Business law (BLAW)

265-Business of Law I, 266-Business of Law II, 354-Women and the Law,

Criminal Justice (CJ) 320-Juvenile Delinquency, 322-Criminology

### **Economics (ECON)**

201-Principles of Microeconomics, 202-Principles of Macroeconomics, 289-Special Topics: Economics, 305-Money and Banking, 312-Political Economy of Discrimination, 324-Labor Economics, 328-Domestic Topics in Third World Economic Development, 329-International Topics in Third World Economic Development, 332-Public Finance, 334-Public Regulation, 340-Contemporary International Trade Issues, 342-International Finance, 344-Comparative Economic Systems, 361-U.S. Economic History, 362-History of Economic Thought, 489-Special Topics: Economics

### **Environmental Science and Management (ESM)**

307-Multicultural Perspectives on the Environment

### **Ethnic Studies (ETHN)**

200-Introduction to Ethnic Studies

Finance (FINC)

FINC 210-Personal Finance

### Geography (GEOG)

220-Economic Geography, 235-American Landscape, 237-Poverty in the United States, 240-The United States, 241-Wisconsin, 242-Canada, 322-Urban Geography, 324-Historical Geography of the United States, 335-The American Environment: Perceptions and Policies, 340-Europe, 342-Latin America, 343-Africa, 344-Asia and Oceania, 385-Interdisciplinary Seminar on the American Frontier

### History (HIST)

201-Introduction to Asian Civilization, 202-Introduction to Latin American Civilizations, 203-The Mediterranean: A Survey, 204-U.S. Immigration and Ethic History, 205-Women, s History: United States, 206-Native Americans & the United States, 207-African American History, 208-History of the Mexican American/Chicano, 210-Public History: An Introduction, 211-Ancient Near East, 212-Old Testament World, 213-Early Christianity, 215-United States History to 1865, U. S. History I, 216-U.Us. History from 1865, U.S. History II, 220-The Rise and Fall of Adolf Hitler, 221-Great Battles, 289-Topics in History, 301-History of Film, 303-Woman, s History: Europe, 304-History of the Holocaust, 305-Woman, s History: Global Perspectives, 308-Western Political Thought: The Renaissance Through Marx, 309-Western Political Thought: Nietzsche to the Present, 310-History of the American Political Thought, 312-Global Migration in U.S. History, 321-The Middle Ages, 322-The Renaissance, 323-The Reformation, 324-Absolutism, Enlightenment, and Revolution, 325-Late Middle Ages, 326-Hitler to Bismark, 327-World War I to World War II, 328-World War II and the Cold War, 330-Revolution in Modern History, 331-Russian History: Peter I to the Present, 332-The Islamic Middle East to 1500, 334-Modern China 1800-present, 335-Modern Japan 1600 to present, 349-Middle East History and Politics, 351-U.S. Colonial

History I: Early Settlement, 352-U.S. Colonial History II: Era of the Revolution, 353-U.S. History: The Middle Period 1790-1850, 354-U.S. History: Age of Growth, 356-United States Middle Period, 358-U.S. History from 1890 to 1945, 359-U.S. History from 1945, 361-U.S. Economic History, 362-History of Economic Thought, 364-History of the Upper Midwest: Furs, Logs, & Farms, 366-Social History of the U.S., 367-History of U.S. Foreign Policy, 369-American Intellectual History, 385-Interdisciplinary Seminar on the American Frontier, 389-Topics in History, 415-Philosophy of History, 416-Constitutional Law, 434-Germany: Bismarck to Hitler, 436-History of Colonialism and Imperialism, 483-Reading Seminar: Race and Ethnicity, 484-Reading in Material and Popular Culture, 486-Reading Seminar: History of the Americas, 489-Topics in History, 490-Reading in History

### **International Studies (INTS)**

200-Intro to International Studies, 365-Contemporary Europe, 370-International Study Tour, 377-Semester Abroad, 442-World Cinema

### Journalism (JOUR)

240-Introduction to Visual Communication, 319-The Media and American Politics, 320-Journalism and Public Opinion, 345-History of Mass Communication, 460-International Communication, 465-Mass Communication Law

### **Political Science (POLS)**

211-Government and Politics in Minnesota and Wisconsin, 212-The Politics of Equality and Inequality in the United States, 225-Introduction to Public Administration, 230-Contemporary Political Ideologies, 245-Introduction to Comparative Politics, 253-State and Local Politics, 256-Public Policymaking,

260-Introduction to International Relations, 308-Western Political Thought: The Renaissance through Marx, 309-Western Political Thought: Nietzsche to the Present, 310-History of American Political Thought,

311-American Political Parties and Elections, 312-Political Economy of Discrimination, 314-Woman and Politics, 319-The Media and American Politics, 320-Journalism and Public Opinion, 321-Political Participation, 322-Politics of American Cities, 324-Managing Public Services, 326-The American Presidency: The Office and its Powers, 327-Congressional Politics, 332-Public Finance, 334-Public Regulation of Business, 344-Public of the Developing World, 346-Politics of Western Europe, 348-Politics of East Asia, 349-Modern Middle East History and Politics, 354-Women and the Law, 355-Environmental Law, 365-American Foreign Policy, 367-History of U.S. Foreign Relations, 369-International Political Economy, 377-The United Nations, 416-Constitutional Law

### Psychology (PSYC)

225-Psychology of Sex Differences, 236-Developmental Psychology: Childhood and Adolescence, 250-Industrial/ Organizational Psychology, 260-Behavior Modification, 265-Social Psychology, 305-Learning and Motivation, 310-Memory and Thinking, 320-Psychology of Personality, 325-Abnormal Psychology, 336-Developmental Psychology: Adulthood and Aging, 340-Animal Behavior, 350-Sensation and Perception, 355-Physiological Psychology, 365-Individual and Group Processes, 410-Introduction to counseling, 421-Mental Retardation, 425-Introduction to Clinical Psychology

### Social Science (ISSC)

496-Social Science Capstone

### Social Work (SOWK)

205-Introduction to Social Work and Social Welfare, 215-Human Behavior in the Social Environment 250-Use, Abuse and Addiction, 350-Social Welfare Policy

## Sociology (SOCI)

205-Culture and Personality, 208-Sociology of Diversity,
211-International Perspectives on Children,
218-Deviant Behavior, 221-Global Perspectives on Women,
225-Sociology of Race and Ethnicity,
227-Religious Groups and Cults, 228-Native American
Cultures, 230-Sociology of Sport and Leisure,
240-Contemporary Social Problems, 245-Environmental
Sociology, 247-Human and Cultural Origins, 315-Sociology
of Later Life, 323-Sociology of the Family, 326-Sociology
of Gender Roles, 330-Social Organizations, 338-Global
Perspectives on Health and Disease, 340-Sociology of Rural
Life, 345-Sociology of Urban Life, 348-Faces of Culture

### Speech Communications and Theatre Arts (SCTA)

206-Family Communication, 208-Problem Solving in Small Group Communication, 306-Nonverbal Communication, 311-Persuasion, 313-Intercultural Communication, 316-Organization Communication, 318-Communication and Leadership, 319-Freedom to Speak, 334-Playwriting, 414-Speech in History, 440-Gender Communication

## Women's Studies (WMST)

200-Introduction to Women's Studies, 205-Women's History: United States, 206-Family Communication, 220-Gender Issues in Science, 221-Global Perspectives on Women, 225-Psychology of Sex Differences, 305-Women's History: Global Perspective, 314-Woman and Politics, 323-Sociology of Family, 326-Sociology of Gender Roles, 354-Women and the Law, 440-Gender Communication

# Options in the Liberal Arts Degrees

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

### **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).

### **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 adviser 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 adviser.

## **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 adviser 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.

# 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 adviser 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 adviser 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 adviser 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 adviser 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 adviser. 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 adviser.

# 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. Information on these programs can be found in the Major/Minor/Program description section of the catalog.

Biotechnology Major Environmental Science Major Ethnic Studies Minor Film Studies Minor International Studies Minor International Study Abroad Programs Marketing Communications Major Musical Theatre Minor Professional Writing Minor Science: Broad Field Science Major (Liberal Arts); Broad Field Science Major (Education); Broad Field Science Major (Physical Science); Minor in General Science (Education) Social Science Minor (Education) Social Studies, Broad Field Major Women's Studies Minor

Updated May, 2007

# **College of Business and Economics**

124 South Hall (715) 425-3335 • FAX (715) 425-0707 • www.uwrf.edu/cbe/

The College of Business and Economics consists of programs in accounting, computer science/information systems, economics, finance, management, marketing, and management information systems. The college allows students to combine a high quality professional program with a solid liberal arts foundation.

The vision of the College of Business and Economics is to be the regional leader in the acquisition, application, and transfer of business and economic knowledge. Consistent with this vision, the college has set a goal to attain accreditation of its programs by the Association to Advance Collegiate Schools of Business (AACSB International) and is currently in the accreditation candidacy process.

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

In the College of 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 -Management Information Systems Computer Science and Information Systems -Computer Science -Information Systems Economics

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

# Admission Standards for all majors in the CBE:

Completion of at least 27 required general education credits with a minimum GPA of 2.25. Additionally, the following must be completed, or in progress for completion, during the semester preceding admission. Students may register prior to acceptance, but acceptance is required for attendance in CBE upper-level courses. Students with GPAs between 2.0 and 2.25 may petition to the respective department chair for consideration on a case-by-case basis.

For admission to accounting and business majors:

GPA of 2.25 in ACCT 231, 232; ECON 201,202; CSIS 215; ECON 205 or MATH 156 or MATH 166; ECON or MATH 226; SCTA 116 or ENGL 266.

## For admission to the CSIS major:

GPA of 2.25 in CSIS 161, 162, and 237

## For admission to the Economics major:

GPA of 2.25 in ECON 201, 202, 205; ENGL 100, 200.

# 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. 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 advisers will assist students to maximize their educational opportunities in an efficient manner.

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

# General Education Requirements

(pp. i-iii)

# 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. Minor

In addition to the standard minors listed (Option A), College of Business and Economics students can design their own minors to meet their individual educational and career goals (Option B). An Option B minor is a special program of studies arranged around the particular academic and professional needs of the student. It consists of a core of courses from a major along with a grouping of other courses to meet the particular need. The program has a minimum of 60 credits with a minimum of 36 credits designated as the major and 24 as a minor. The program of study is designed by the student in consulation with the advisor and must be approved by the adviser and Dean of the College of Business and Economics.

All students are required to take a diversity course. This course can be double counted in various ways. See page 12 of the printed catalog for the list of diversity courses.

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.

Updated March, 2007

# **College of Education and Professional Studies**

Wyman Education Building (715) 425-3774; FAX (715) 425-0622 www.uwrf.edu/college-of-education

Departments/programs within the College of Education and Professional Studies include:

Health and Human Performance Teacher Education Counseling and School Psychology Communicative Disorders Social Work

The college prepares undergraduates for professional careers in teaching, social work, and communicative disorders. 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.

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 office of graduate studies or the communicative disorders department.

UWRF 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, and 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 tasks 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 Teacher Education

Application for admission to teacher education is made through the Dean of the College of Education and Professional Studies. Students should begin the admission to teacher education process when they have completed 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: TED 420, 422, 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 312, 315, 317. 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 handbook and on the college website: www.uwrf.edu/college-of-education. Students are responsible for checking the website for the information they will need.

A student may be denied admission to Teacher Education 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.

# Appeal Procedures for Admission to Teacher Education

A student who is denied admission to Teacher Education may begin the appeal process by making an appointment with his or her adviser. The appeal process can only be initiated after the student has received notification from the Dean's office denying admission. A student and/or a 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 handbook or on 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

Authorized department personnel at the university, with reasonable cause, may 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. They may 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/Licensing

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.

 Fill out an application form (PI-1602) available on the Wisconsin Department of Public Instruction's website.
 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.

# 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/experience.

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:

Successful completion of 36 semester credits;
 Attainment of a cumulative grade point average of 2.25, and a major GPA of 2.50;
 Completion of SOWK 150 and 205 with a grade of C or better

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 can 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 spots in the program. 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.

Updated March, 2007

# 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 23 of the printed catalog.

These programs leading to a degree are available in such fields as engineering, law, medicine, optometry, and preveterinary 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 advisers 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 adviser 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 100, 200 6 cr. ECON 201, 202 6 cr.

SCTA 101 3 cr. B. Math, Physics and Chemistry 40 cr. hrs. MATH 166, 167, 256, 266, 331 17 cr. PHYS 211 3 cr. PHYS 101, 102, 161, 162 10 cr. CHEM 121, 122 10 cr. 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); Diversity (3)
ECON 201; ISSC 496; CHEM 121
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 122
C. Directed electives 22-25 cr. hrs.
D. Engineering Courses 30 cr. hrs.
transferred back to UWRF
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 students need to be concerned with developing the capacity to think logically and to critically evaluate the knowledge gained through their courses of study.

Admission to Law School does not call for a particular major field or specific list of courses beyond those required by the University for the undergraduate degree. Consequently, there is no pre-law major at UW-River Falls. Students planning on a legal career should think of their undergraduate studies as preparation toward a goal rather than a prescribed set of courses.

The pre-law adviser's office (Political Science Department) is available to all students on the UW-River Falls campus who have questions regarding law school. The adviser 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. (updated May, 2007)

# 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.
SCTA 101 3 cr/
B. Science and Math 77 cr. hrs.
MATH 146, 147, 166 10 cr.
PHYS 151, 152, 156, 157 10 cr.
BIOL 150, 230, 240, 340 12 cr.
CHEM 121, 122, 231, 232, 236, 237, 251, 256, 340, 361 28
C. Behavioral Sciences 3 cr. hrs.
PSYC 101 3 cr.
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 adviser.

BIOL 150, 230, 324, 340 14 cr. hrs. CHEM 121, 122, 231, 232, 236, 237 18 cr. PHYS 151, 152, 156, 157 10 cr. MATH 146, 147, 166, 167 14 cr. . ENGL 111, 112 6 cr. PSYC 101 + directed electives 8 cr. HIST 3 cr. SOCI 100 3 cr. Human Anatomy and Anatomy/Physiology 6 cr. Introduction to Business 3 cr. Basic Accounting 3 cr. Directed Electives 2+ cr.

# **Pre-Pharmacy**

A. General Education 9 cr. hrs. ENGL 111, 112 6 cr. SCTA 101 3 cr. B. Science and Math 42 cr. hrs. BIOL 150 3 cr. BIOL 230 or 235, 324 3-6 cr. CHEM 121, 122 10 cr. CHEM 231, 232, 236, 237 8 cr. MATH 166, 167 8 cr. (Students may need to take MATH 146, 147 (or 149) before taking MATH 166,167) PHYS 151, 152, 156, 157 10 cr. C. Social Science 9 cr. hrs. ECON 201 3 cr. SOCI 100 3 cr. PSYC 101 3 cr. 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 or 112H 6 cr. SCTA 101 or 116 3 cr. Electives selected from art, literature, music and theatre 6 B. Science and Math 63-69 cr. hrs. MATH 146, 147 4-10 cr. ANSC 341 Biometrics 3 cr. or MATH 216 Elementary Statistical Concepts BIOL 150, 230, 240, 324, 350 (ANSC 257 will substitute for BIOL 350) 16 cr. CHEM 121 (or 110), 122, 231, 232, 236, 237, 361 21 PHYS 151, 152, 156, 157 10 cr. ANSC 111, 121, 231, 345 6-10 cr. 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.

# 3+1 Degree in Animal Science

For students in the Pre-Veterinary Medicine program. The 3+1 program is designed for Pre-Veterinary students who are accepted into Veterinary School prior to completing their BS degree in Animal Science. Students can complete three years (95-96 credits) at UW-River Falls and after successful completion of their first year of veterinary school, they may be able to obtain an Animal Science degree from UW-River Falls. A. General Education 21 cr. hrs. ENGL 111, 112 or 112H 6 cr. SCTA 101 or 116 3 cr. Humanities and Fine Arts: select electives from art, music, dance theatre, literature, etc. 6 cr. Socal and Behavioral Sciences: select from Anthropology, Economics, Environmental Studies, Geography, History, Political Science, Psychology, or Sociology 6 cr. B. Science and Math 68-69 cr. hrs. MATH 146, 147 6 cr. BIOL 150, 230 or 240, 324 10 cr. CHEM 121 (or 110), 122, 231, 232, 236, 237, 361 21 cr. PHYS 151, 152, 156, 157 10 cr. ANSC 111, 231, 232, 257, 260, 345 15 cr. ANSC 167 and 168 or ANSC Production Course 3-4 cr. ANSC 341 Biometrics 3 cr. C. Other Requirements 8 cr. hrs. AGEC 230 Agricultural Economics I 3 cr. A diversity course (may be in Gen Ed) 3 cr. PE 108 Physical Education 1 cr. Physical Education Activity Classes (2 x .5) 1cr. Total Credits 95-96 cr. hrs.

See page iv for a list of courses that fulfill the diversity requirement.

# Accounting (ACCT)

Department of Business Administration College of Business and Economics

# 124 South Hall (715) 425-3335

Reza Rahgozar-Chair, Joy Benson, Charles Corcoran, Brian Huffman, Dawn Hukai, Claire Kilian, Ozcan Kilic, June Li, Darryl Miller, Marina Onken, Carl Popelka, Jude Rathburn, Megan Sun, Mary Tichich, Stacy Vollmers, Ellen Schultz-Academic Adviser.

The vision of the College of Business and Economics is to be the regional leader in the acquisition, application, and transfer of business and economic knowledge. Consistent with this vision, the college has achieved accreditation of its programs by the Association to Advance Collegiate Schools of Business (AACSB) International.

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 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 Minnesota. As of 2007, 48 states and jurisdictions have legislated the 150 credit hour requirement. The 150 semester hours may be completed at the undergraduate or the graduate level. Students should consult their adviser for the best course of study.

Students should plan to take MATH 146 (if necessary) before taking MATH 156 or ECON 205 as required in General Education. The lower division course 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.

Overall, one-half of the credits required for graduation must be taken outside of the College of Business and Economics. At least 50 percent of the business credits required must be taken in the UWRF College of Business and Economics.

# General Education Requirements

With the following exceptions: Mathematics: 3 cr. hrs. MATH 156 Calculus for Business and Social Sciences or ECON 205 Quantitative Analysis or MATH 166 Calculus I (4 cr.)

# Admission Requirements

For all majors in the College of Business and Economics (CBE):

Completion of at least 27 required general education credits with a minimum GPA of 2.25.

Additionally, the following must be completed, or in progress for completion, during the semester preceding admission. Students may register prior to acceptance, but acceptance is required for attendance in CBE upper-level courses. Students with GPAs between 2.0 and 2.25 may petition to the respective department chair for consideration on a case-by-case basis.

For admission to Accounting and Business Administration majors:

GPA of 2.25 in ACCT 231, 232; ECON 201, 202; CSIS 215; ECON 205 or MATH 156 or MATH 166; ECON or MATH 226; SCTA 116 or ENGL 266.

\*These requirements apply to students entering UW-River Falls Fall Semester 2003 or later.

# Accounting-Broad Area Major - 69 Total Credits

# Lower Division Requirements: 24 cr. hrs.

ECON 201 Principles of Microeconomics 3 cr. ECON 202 Principles of Macroeconomics 3 cr. ACCT 231 Principles of Accounting I 3 cr. ACCT 232 Principles of Accounting II 3 cr. CSIS 215 Information Systems for Business Management 3 cr. ECON 226 Introduction to Statistics 3 cr. or MATH 226 Introduction to Statistics BLAW 265 Business Law I 3 cr. **Choose one 3-credit 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 3cr. MNGT 300 Management and Organizational Behavior 3 cr. MKTG 310 Principles of Marketing 3 cr. FINC 345 Managerial Finance 3 cr. ACCT 321 Intermediate Accounting I 3 cr. ACCT 322 Intermediate Accounting II 3 cr. ACCT 356 Managerial Cost Accounting 3 cr. ACCT 357 Advanced Managerial Cost Accounting 3 cr. ACCT 360 Federal Income Tax I 3 cr. ACCT 361 Federal Income Tax II 3 cr. ACCT 366 Accounting Systems 3 cr. ACCT 430 Advanced Accounting 3 cr. ACCT 461 Auditing 3 cr. **Directed Electives: 6 cr. hrs.** Select from Accounting (not ACCT 201), Management (not MNGT 100, 150, or 205), Finance (not FINC 210), Marketing (not MKTG 311), Economics (not ECON 100 or 205), Computer Science (not CSIS 105 or 151), ENGL 251 or ENGL 367.

No 9000 level courses (transfer courses with no UWRF equivalent) will apply as directed electives.

### **Required Suporting Courses**

A. CBE 100 Orientation to CBE 1cr.
CBE 200 Professonal Development I 1 cr.
CBE 300 Professonal Development II 1 cr.
B. Econ 205 Quantitive Analysis 3 cr.
or Math 156 Calculus for Business and Social Science 3 cr.
or Math 166 Calculus I 4 cr.

Revised March, 2007

# Adapted Physical Education

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

111 Karges Center (715) 425-3705 www.uwrf.edu/hhp/

Chair–Faye Perkins, Debra Allyn, Jenn Berna, Richard Bowen, Martha Brennan, Kevin Bullis, Dean Culpepper, Gary Eloranta, Patti Ford, Steve Freeman, Bill Henderson, Cindy Hovet, Crystal Lanning, John O'Grady, Robert Ritzer, Jim Tangen-Foster, Sue Tarr, Karla Zhe

# Adapted Physical Education Minor

# Adapted Physical Education Minor: 14-15 Total Credits

P ED 305 Developmental Adapted Physical Education 3 cr.
P ED 370 Adapted Physical Education Practicum 3 cr.
PSYC 420 Introduction to Learning Disabilities 3 cr.
PSYC 421 Mental Retardation 3 cr.
PSYC 480 Seminar in Psychology: Motor Functioning: Impact on Academic Performance 2-3 cr.

# **Directed electives: 7-8 credits**

HEAL 269 Wellness 3 cr. HEAL 350 Community Health 3 cr. PSYC 333 Integration of the Exceptional Child 3 cr. PSYC 325 Abnormal Psychology 3 cr. ANSC 168 Equine Equitation and Management Lab 2 cr. ANSC 261 Advanced Horsemanship 3 cr. OR ANSC 268 Balanced Seat Applications 3 cr.

# NOTE:

Students must have the following prerequisite course work: P ED 300 Adapted Physical Education P ED 245 Motor Development Throughout Life PSYC 330 The Exceptional Child

Updated 11/03/2006

# Agricultural Economics (AGEC)

# Department of Agricultural Economics

# College of Agriculture, Food and Environmental Sciences

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

David Trechter–Chair, Brenda Boetel, Gregg Hadley, Lewis May, Stanley Schraufnagel, Nate Splett.

# General Education Requirements

# Agricultural Business Major

# **Major Requirements 59 Total Credits**

# Foundation Courses in Agriculture 15 cr. hrs.

AGEC 230 Agricultural Economics I 3 cr. ANSC 111 Introduction to Animal Science 3 cr. AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. CROP 161 Introduction to Plant Science 3 cr. SOIL 210 Introductory Soil Science 3 cr.

# Required Courses 30 cr. hrs.

AGEC 231 Agricultural Economics II 3 cr. AGEC 250 World Food and Population 3 cr. AGEC 320 Statistical Methods 3 cr. AGEC 330 Agricultural Production Economics 3 cr. AGEC 355 Agricultural Markets and Prices 3 cr. AGEC 365 Agricultural Finance 3 cr. AGEC 440 Agricultural Policy I (writing intensive) 3 cr. AGEC 441 Agricultural Policy II 3 cr. AGEC 450 Introduction to Natural Resource Economics 3 cr. AGEC 455 Commodity Marketing 3 cr.

# Select A or B Below 14 cr. hrs.

# A. AGEC 240 Cooperatives 2 cr.

AGEC 305 Agricultural Business Accounting 3 cr. AGEC 360 Farm Management 3 cr. AGEC 410 Professional Selling 3 cr. AGEC 460 Agribusiness Firm Management (writing intensive) 3 cr.

# **B. ECON 326 Statistical Methods for Economics and Business 3 cr.**

ECON 426 Forecasting and Economics 3 cr. AGEC 300 or 400 level courses 8 cr.

## **Required Supporting Courses 3-4 cr. hrs.**

MATH 156 Calculus for Business and Social Science 3 cr. or MATH 166 Calculus I or 4 cr. (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 adviser, 15 credits from ECON, MATH, and/or CSIS.

Agricultural Business Minor

# Required courses 24 cr. hrs.

AGEC 230 Agricultural Economics I 3 cr. AGEC 231 Agricultural Economics II 3 cr. AGEC 240 Cooperatives 3 cr. AGEC 305 Agricultural Business Accounting 3 cr. AGEC 355 Agricultural Markets and Prices (writing intensive) 3 cr. AGEC 360 Farm Management or AGEC 365 Agricultural Finance 3 cr. AGEC 410 Professional Selling 3 cr. AGEC 468 Agribusiness Firm Management 3 cr. Agricultural Economics Minor

# Required courses 24 cr. hrs.

AGEC 230 Agricultural Economics I 3 cr. AGEC 231 Agricultural Economics II 3 cr. AGEC 240 Cooperatives 2 cr. AGEC 320 Statistical Methods 3 cr. AGEC 355 Agricultural Markets and Prices (writing intensive) 3 cr. AGEC 360 Farm Management 3 cr. or AGEC 365 Agricultural Finance AGEC 440 Agricultural Policy I (writing intensive) 3 cr. AGEC 442 Agricultural Policy II (writing intensive) 3 cr.

## See Also: Farm Management.

Updated April 2007.

# **Agricultural Education** (**AGED**)

Department of Agricultural Education College of Agriculture, Food and Environmental Sciences

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

James Graham-Chair, Timothy Buttles, Tamia Trulson

The mission of the Department of Agricultural Education is to prepare students for successful roles in education, leadership, and communication to meet the needs of the global agriculture community through educational, professional development, and service activities.

Specific requirements in addition to courses must be completed before enrolling in the upper level education courses and student/intern teaching. Please see the departmental web site www.uwrf.edu/ag-education/ for a complete list of requirements. General Education Requirements

The following general education courses are required to meet teacher licensing requirements of the WI Department of Public Instruction:

CW (Communication - Reading and Writing)

ENGL 100-Academic Reading and Writing (3)

## CS (Communication - Speaking and Listening)

SCTA 101-Fundamentals of Oral Communication (3) or SCTA 116-Business and Professional Communication (3)

## CA (Advanced Communication)

ENGL 200-Investigating Ideas: Reading, Writing, & the Disciplines (3)

**SB** (Social and Behavioral Sciences) HIST 201-Introduction to Asian Civilization (3)

## HF (Humanities and Fine Arts)

ART 100-Introduction to Art (3) or DANC 100-History/Appreciation of Dance (3) or MUS 100-Understanding Music (3) or PHIL/ART 310-Philosophy and History of Visual Art (3) or SCTA 105-Introduction to Theater and Drama (3) ENGL 241-Human Issues in Literature (3) or ENGL 243-Types of Literature (3) M (Mathematics) MATH 146-College Algebra (3)

# SL (Scientific Investigation)

BIOL 150-General Biology (3) CHEM 121-General Chemistry I (5) or CHEM 120-Introduction to General Chemistry (6)

# EC (Ethical Citizenship)

CROP 120-Plants and Society (3)

# Professional Education Requirements

# Professional Education Requirements: 32 cr. hrs.

- AGED 120 Orientation to Agriculture and Extension Education 1 cr.
- AGED 201 Program Delivery in Agricultural, Extension, and Leadership Education 2 cr.
- PSYC 330 The Exceptional Child 3 cr.
- TED 212 Educational Psychology: Middle and Secondary Education (writing intensive) 5 cr.
- TED 252 Foundations of Multicultural Education 3 cr.
- TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr.
- TED 440 Techniques of Middle/Secondary Education: Agriculture 3 cr.
- TED 475 Student Teaching: K-12 12 cr.
- or TED 479 Intern Teaching: Secondary 12 cr.

# Agricultural Education Major

## Foundation Requirements-Select five: (14-16 cr.)

AGEC 230 Agricultural Economics I 3 cr. AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. ANSC 111 Introduction to Animal Science 3 cr. CROP 161 or HORT 161 Introduction to Plant Science 3 cr. ESM 109 Introduction to Forestry 2 cr. FDSC 110 The Science of Food 3 cr. and FDSC 113 Introduction to Food Science 1 cr. SOIL 210 Introductory Soil Science 3 cr.

# Major Requirements: 38-40 cr. hrs.

## Required Courses (25 cr.):

AGED 202 Leadership and Group Dynamics 3 cr.
AGED 275 Early Field Experience 1 cr.
AGED 369 Foundations of Career and Technical Education 3 cr.
AGED 403 Supervision of Work Experience and Youth Organizations 3 cr.
AGED 462 Curriculum Design in Vocational Education 3 cr.
ANSC 231 Principles of Nutrition 3 cr.
CROP 257 Genetics or ANSC 257 Genetics 3 cr.
ESM 300 Environmental Education 3 cr.
HORT 169 Introduction to Horticulture 3 cr.
Choose one of the following (2-3 cr.):
AGEC 240 Cooperatives 2 cr.
AGEC 355 Agricultural Markets and Prices 3 cr.

## Choose one of the following (3 cr.): AGEC 360 Farm Management 3 cr. AGEC 361 Horticultural Business Management 3 cr. AGEC 468 Agribusiness Firm Management 3 cr. **Choose one of the following (3-4 cr.):** AGEN 240 Structures 3 cr. AGEN 255 Welding and Metal Manufacturing 3 cr. AGEN 320 Internal Combustion Engines 3 cr. AGEN 333 Landscape Construction 3 cr. AGEN 350 Applied Electricity 3 cr. AGEN 440 Soil and Water Conservation 4 cr. Directed CAFES Electives: 5-7 cr. hrs.

Updated May, 2007

# Agricultural Engineering Technology (AGEN)

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

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

Dean Olson–Chair, Kamal Adam, Jerry Nechville, Robert Butler

# General Education Requirements

As listed on pages i-iii with the following exceptions:

Ethical Citizenship: ESM 105 Introduction to Environmental Studies, required for Environmental Engineering Technology Option

Sciences : 8-9 cr. hrs.

BIOL 100 or BIOL 150 or GEOL 101, CHEM 121 or 110 with Dean's approval. PHYS 151 or 161 required. Mathematics: MATH 156 or MATH 166 required 3 cr. hrs.

# Foundation Courses in Agriculture 12 cr. hrs.

AGEN 150 Agricultural and Environmental Engineering Technology 3 SOIL 210 Introductory Soil Science 3 cr. AGEC 230 Agricultural Economics I 3 cr.

## Choose one of the following: 3 cr.

ANSC 111 Introduction to Animal Science FDSC 112 Introduction to Food Science CROP 161 Introduction to Plant Science HORT 161 Introduction to Plant Science

# Agricultural Engineering Technology Major Requirements 55-60 Total Credits Core Courses: 29 cr. hrs.

AGEN 185 Agricultural Engineering Technology Professional Seminar I 1 cr.
AGEN 240 Structures 3 cr.
AGEN 285 Agricultural Engineering Technology Professional Seminar II 1 cr.
AGEN 350 Applied Electricity 3 cr.
AGEN 352 Food and Process Engineering 3 cr. AGEN 355 Irrigation and Drainage (writing intensive) 3 cr.
AGEN 385 Agricultural Engineering Technology Professional Seminar III 1 cr.
AGEN 485 Agricultural Engineering Technology Professional Seminar IV 1 cr.
GENG 121 Engineering Drawing 3 cr.
GENG 245 Materials Design Requirements 3 cr.
GENG 265 Engineering Graphics 3 cr.
GENG 450 Engineering Project Management 3 cr.
PHYS 156 General Physics Laboratory 1 cr.
or PHYS 101 General Physics Laboratory

# Choose one of the following three options:

# Agricultural Engineering Technology

# Option 26-29 cr. hrs.

AGEN 320 Internal Combustion Engines 3 cr. AGEN 361 Machinery and Power Mechanics 4 cr. AGEN 363 Precision Agriculture Technology 3 cr. AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. GENG 235 Surveying 3 cr. Choose two from: AGEN 425 Environmental Engineering Technology 4 cr. AGEN 443 Controlled Environment Systems 3 cr. AFES 492 Experiential Learning in Agriculture, Food, and Environmental Science 3cr. Choose one from: AGEN 365 Waste Management Systems (writing intensive) 3 cr. AGEN 389 Agricultural Engineering Technology: 1/4 Scale Tractor 3 cr. Choose one from: AGEN 255 Welding and Metal Manufacturing 3 cr. GENG 201 Industrial Safety 2 cr. GENG 236 Advanced Surveying 3 cr. GENG 251 Static Strength of Materials 3 cr. GENG 252 Dynamics 3 cr. PHYS 152 General Physics II 4 cr. or PHYS 162 General Physics II

# Environmental Engineering Technology

Option 27-28 cr. hrs. CHEM 122 General Chemistry II 5 cr. CHEM 230 General Organic Chemistry 3 cr. BIOL 324 Microbiology 4 cr. AGEN 365 Waste Management Systems (writing intensive) 3 cr. AGEN 425 Environmental Engineering Technology 4 cr. AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. GENG 235 Surveying 3 cr. Choose one from: GEOL 445 Hydrogeology 3 cr. AGEC 450 Introduction to Natural Resource Economics 3 cr. ESM 360 Applied Hydrology and Water Quality 4 cr.

# Mechanized Systems Management Option 28-31 cr. hrs.

GENG 201 Industrial Safety 2 cr. ENGL 367 Technical Writing 3 cr. AGEC 305 Agricultural Accounting 3 cr. AGEC 320 Statistical Methods 3 cr. AGEC 360 Farm Management 3 cr. AGEC 368 Professional Selling (writing intensive) 3 cr. AGEC 468 Agribusiness Firm Management (writing intensive) 3 cr. **Choose one from:** AGEN 425 Environmental Engineering Technology 4 cr. AGEN 443 Controlled Environment Systems 3 cr. AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr. AFES 492 Experiential Learning in Agriculture, Food, and Environmental Science Choose two from: AGEN 320 Internal Combustion Engines 3 cr. AGEN 361 Machinery and Power Mechanics 4 cr.

AGEN 363 Precision Agriculture Technology

AGEN 365 Waste Management Systems (writing intensive) 3 cr.

# 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 CSIS 105 in their freshman year.

# Agricultural Engineering Technology Minor Requirements 22 Total Credits

## Required Courses: 6 cr. hrs.

AGEN 150 Agricultural and Environmental Engineering Tech 3 cr.

GENG 265 Engineering Graphics 3 cr.

# Complete one of the following sets of courses: 7-10 cr. hrs.

1 AGEN 320 Internal Combustion Engines 3 cr.

AGEN 361 Machinery and Power Mechanics 4 cr.

AGEN 465 Fluid Power Systems 2 cr.

2 AGEN 350 Applied Electricity 3 cr.

AGEN 451 Agricultural Instrumentation and Electronics (writing intensive) 2 cr.

GENG 368 CAD Applications 3 cr.

**3** AGEN 352 Food and Process Engineering 3 cr.

AGEN 455 Advanced Food and Process Engineering 3 cr.

GENG 368 CAD Applications 3 cr.

**4** AGEN 240 Structures 3 cr.

AGEN 333 Landscape Construction 3 cr.

GENG 450 Engineering Project Management 3 cr.

**5** AGEN 355 Irrigation and Drainage (writing intensive) 3 cr.

AGEN 365 Waste Management Systems (writing intensive) 3 cr.

AGEN 425 Environmental Engineering Technology 4 cr. 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 www.uwrf.edu/college-of-agriculture/

Agricultural Studies is a four-year Bachelor of Science degree program. Students majoring in Agricultural Studies will acquire broad knowledge in the fields of agriculture, food and the environmental sciences. Students may also pursue individual special interests through elective classes. In consultation with an adviser, students may choose elective courses in areas such as agronomy, animal science, communications, marketing, management, international studies, etc. The Agricultural Studies major also requires completion of a minor in an agricultural subject area.

A minor in any agricultural subject area is required.

# General Education Requirements

As listed on pages i-iii with the following exceptions: Social and Behavioral: ESM 105, Introduction to Environmental Studies Sciences: CHEM 121, General Chemistry or CHEM 120, Introduction to General Chemistry Mathematics: MATH 146, College Algebra, or equivalent

# Foundation Requirements 15 cr. hrs.

AGEC 230 Agricultural Economics I 3 cr. AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. CROP 161 Introduction to Plant Science or HORT 161 Introduction to Plant Science 3 cr. ANSC 111 Introduction to Animal Science 3 cr. SOIL 210 Introductory Soil Science 3 cr. Agricultural Studies Major

# Major Requirements 34 Total Credits

Choose one course from the following (3 cr.): AGEC 305 Agricultural Accounting 3 cr. AGEC 345 Agricultural Law3 cr. AGEC 355 Agricultural Markets and Prices 3 cr. AGEC 360 Farm Management 3 cr. AGEC 365 Agricultural Finance 3 cr. Choose one course from the following (3 cr.): AGED 110 Agricultural Communications 3 cr. AGED 202 Leadership and Group Dynamics 3 cr. Choose one course from the following (3 cr.): AGEN 240 Structures 3 cr. AGEN 320 Internal Combustion Engines 3 cr. AGEN 325 Alternate Energy Systems 3 cr. AGEN 333 Landscape Construction 3 cr. AGEN 350 Applied Electricity 3 cr. AGEN 352 Food and Process Engineering 3 cr. AGEN 355 Irrigation and Drainage (writing intensive) 3 cr. AGEN 361 Machinery and Power Mechanisms 3 cr. AGEN 363 Precision Agriculture Technology 3 cr. AGEN 365 Waste Management Systems (writing intensive) 3 cr. Choose one course from the following (3-4 cr.): ANSC 231 Principles of Nutrition 3 cr. ANSC 257 Genetics 3 cr. ANSC 260 Animal Physiology 4 cr. Choose one course from the following (3 cr.): CROP 263 Forage Crop Production 3 cr. CROP 266 Corn and Soybean Production (writing intensive) 3 cr. HORT 169 Introduction to Horticulture 3 cr. Choose one course from the following (4 cr.): SOIL 311 Soil Fertility 4 cr. SOIL 440 Soil and Water Conservation 4 cr. Also take: FDSC 112 Introduction to Food Science 3 cr. CHEM 230 General Organic Chemistry 3 cr. and a 1-credit seminar class from one of the following (1 **cr.):** ANSC 485, DASC 485, CROP 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

# Minor Requirements 22 Total Credits

Choose four courses from the following (12 cr. hrs.): ANSC 111 Introduction to Animal Science 3 cr.
CROP 161 Introduction to Plant Science or HORT 161 Introduction to Plant Science 3 cr.
AGEC 230 Agricultural Economics I 3 cr.
FDSC 110 The Science of Food 3 cr.
ESM 105 Introduction to Environmental Studies 3 cr.
SOIL 210 Introductory Soil Science 3 cr.
AGED 110 Agricultural Communications 3 cr.
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 electives 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.

## **Animal Science (ANSC)**

## Department of Animal and Food Science College of Agriculture, Food and Environmental Sciences

### 247 Agriculture Science Hall (715) 425-3704 www.uwrf.edu/animal-science

Steven Kelm-Chair, Larry Baumann, Dennis Cooper, Thomas Goerke, Kristina Hiney, Anthony Jilek, Sylvia Kehoe, Ranee May, Nathan O\'Connor, Gary Onan, Peter Rayne, Purnendu C. Vasavada, Bonnie Walters, Steve Watters

## General Education Requirements

#### As listed with the following exceptions:

CS (Communication/Speaking and Listening) designator: SCTA 101 or SCTA 116 is required

SL (Scientific Investigation) / S (Sciences) designator: BIOL 150 is required CHEM 120 or CHEM 121 is required

## Foundation Courses in Agriculture: 9-12 cr. hrs., depending on emphasis

**Required Courses for all emphases:** ANSC 111 Introduction to Animal Science 3 cr. AGEC 230 Agricultural Economics I 3 cr. Select 2 from the following (Meat Animal and Equine emphases):

## Select 1 from the following (Veterinary Technology emphasis):

FDSC 110 The Science of Food 3 cr. AGEN 150 Introduction to Ag Engineering 3 cr. CROP 161 Introduction to Plant Science 3 cr. or HORT 161 Introduction to Plant Science 3 cr. SOIL 210 Introduction to Soils 3 cr.

## Animal Science Major

#### Required Courses: 25 cr. hrs.

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

#### Emphasis: Select A, B, or C below:

#### A - Meat Animal 9 cr. hrs.

ANSC 238 Meat and Meat Products 3 cr. **Choose one from the following:** ANSC 366 Swine Production 3 cr. ANSC 367 Beef Production 3 cr. **Choose one from the following:** ANSC 240 Meat Product Processing 3 cr. ANSC 467 Feedlot Management 3 cr. A second production course from ANSC 365, 366, 367, 368 3 cr.

#### B - Equine 11 cr. hrs.

ANSC 167 Equine Management and Equitation 2 cr. ANSC 168 Equine Equitation and Management Lab 2 cr. ANSC 369 Equine Production 4 cr. **Choose one from the following:** ANSC 261 Advanced Horsemanship 3 cr. ANSC 268 Balanced Seat Applications 3 cr.

#### C - Veterinary Technology 54 cr. hrs.

ANSC 121 Companion Animals 2 cr.
CHEM 230 General Organic Chemistry 3 cr.
or CHEM 231 Organic Chemistry I 3 cr.
AGBI 251 Agricultural Biochemistry 3 cr.
or CHEM 361 Biochemistry I 3 cr.
BIOL 230 General Zoology 3 cr.
BIOL 243 Introduction to Biological Greek & Latin 2 cr.
BIOL 324 Microbiology 4 cr.
37 credits transferred from an accredited Veterinary Technician program

Choose one option below - Required for Meat Animal and Equine emphases, not required for Veterinary Technology emphasis:

## Management Option: 22 cr. hrs.

#### Required Courses: 10 cr. hrs.

CHEM 230 General Organic Chemistry 3 cr. AGBI 251 Agricultural Biochemistry 3 cr. BIOL 324 Microbiology 4 cr. Directed Electives: 12 cr. hrs. **Choose two courses from:** AGEC 305 Agricultural Accounting 3 cr. AGEC 345 Agricultural Law 3 cr. AGEC 355 Agricultural Markets and Prices 3 cr. AGEC 360 Farm Management 3 cr. AGEC 365 Agricultural Finance 3 cr. Select a total of six credits of 200 level or higher courses from Food Science, Agricultural Education, Agricultural Economics, Agricultural Engineering, Plant and Earth Science, Modern Language, or the College of Business and Economics. 6 cr.

### Science Option: 32-37 cr. hrs.

#### **Required Courses:**

CHEM 122 General Chemistry II 5 cr. CHEM 231 Organic Chemistry I 3 cr. CHEM 236 Organic Chemistry Lab I 1 cr. or CHEM 246 Synthetic and Analytical Techniques I 2 cr. CHEM 232 Organic Chemistry II 3 cr. CHEM 237 Organic Chemistry Lab II 1 cr. or CHEM 247 Synthetic and Analytical Techniques II 2 cr. CHEM 361 Biochemistry I 3 cr. MATH 147 College Algebra and Trigonometry 3 cr. or MATH 149 Precalculus 4 cr. or MATH 166 Calculus I 4 cr. PHYS 151 General Physics 4 cr. or PHYS 161 General Physics 4 cr. ANSC 341 Biometrics 3 cr. BIOL 324 Microbiology 4 cr. Directed Electives: 2-4 cr. hrs. Choose one from the following: ANSC 447 Endocrinology 2 cr. BIOL 230 General Zoology 3 cr. BIOL 240 Cell Biology 3 cr. CHEM 362 Biochemistry II 3 cr. CHEM 461 Pharmacology 3 cr. PHYS 152 General Physics II 4 cr. or PHYS 162 General Physics II 4 cr.

### Minor Option: 22-24 cr. hrs.

Any minor of 22-24 credits or second major (other than Animal Science, Dairy Science, or Ag Studies). In addition to the minor or second major the following three courses are required: CHEM 230 General Organic Chemistry 3 cr.

AGBI 251 Agricultural Biochemistry 3 cr. BIOL 324 Microbiology 4 cr.

### Animal Science Minor

#### Minor Requirements: 22 cr. hrs. **Required Courses: 12 cr. hrs.** ANSC 111 Introduction to Animal Science 3 cr. ANSC 231 Principles of Nutrition 3 cr. ANSC 232 Applied Feeds and Feeding 3 cr. ANSC 257 Genetics 3 cr. **Directed Electives 3-4 cr. hrs.** Choose one course from the following: ANSC 365 Poultry Production 3 cr. ANSC 366 Swine Production 3 cr. ANSC 367 Beef Production 3 cr. ANSC 368 Sheep Production 3 cr. ANSC 369 Equine Production 4 cr. Animal Science Electives 6-7 cr. hrs. Any combination of additional Animal Science (ANSC) courses to bring total credits in minor to a minimum of 22 cr. hrs.

Updated May, 2007

## **Anthropology (ANTH)**

Department of Sociology, Anthropology and Criminal Justice College of Arts and Sciences

326 Kleinpell Fine Arts Building (715) 425-3992

#### www.uwrf.edu/sociology/

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

#### Anthropology Minor: 24 Total Credits Required Courses: 12 cr. hrs.

SOCI 100 Introduction to Sociology 3 cr. (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. ANTH 221 Global Perspectives on Women 3 cr. ANTH 225 Sociology of Race and Ethnicity 3 cr. Take the following courses: ANTH 247 Human and Cultural Origins 3 cr. ANTH 348 Faces of Culture 3 cr. Choose one of the following courses: ANTH 228 Native American Cultures 3 cr. SOCI 338 Global Perspectives on Health and Disease 3 cr. ANTH 338 Global Perspectives on Health and Disease 3 cr. SOCI 211 Global Perspectives on Children 3 cr. ANTH 211 Global Perspectives on Children 3 cr. Electives in Sociology/Anthropology: 12 cr. hrs. At least 6 credits must be at the 300/400 level.

Updated April 2007

## **Art (ART)** Department of Art College of Arts and Sciences

## 172 Kleinpell Fine Arts (715) 425-3266 www.uwrf.edu/art/

Michael Padgett-Chair, Morgan Clifford, Jim Engebretson, Bernice Ficek-Swenson, David Heberlein, Lynn Jermal, Randy Johnston, Peter Mak, Kaylee Spencer, Patrice Wernlund Program Assistant: Susan Zimmer

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. Adviser: 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. Adviser: 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. Adviser: 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. Adviser: 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

Bachelor of Fine Arts - Liberal Arts

Bachelor of Fine Arts -Liberal Arts: 79 Total Credits (no minor required) Foundation Courses in Art: 22 cr. hrs. ART 121 Design Foundation 3 cr. ART 131 Drawing I 3 cr.

ART 132 Drawing II 3 cr. ART 211 Western Art to 1500 3 cr. ART 212 Art History Since 1500 3 cr. ART 309 Senior Exhibition 1 cr. ART 320 Drawing from the Figure 3 cr. ART 485 Art Seminar 3 cr. Required Courses: 46 cr. hrs. Choose 18 credits from: ART 225 Advertising Design I 3 cr. ART 226 Introduction to Fibers 3 cr. ART 227 Introduction to Clay 3 cr. ART 228 Introduction to Metal 3 cr. ART 229 Introduction to Glass 3 cr. ART 235 Introduction to Black and White Photography 3 cr. ART 236 Introduction to Printmaking 3 cr. ART 238 Introduction to Painting 3 cr. Major Studio Area-Choose 15 credits from: ART 326 Studio-Fibers 3 cr. ART 327 Studio-Clay 3 cr. ART 328 Studio-Metals 3 cr. ART 329 Studio-Glass 3 cr. ART 335 Studio-Photography 3 cr. ART 336 Studio-Printmaking 3 cr. ART 338 Studio-Painting 3 cr. 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. **Choose 4 credits from:** Art History elective cr. Electives: 4 cr. hrs. Outside the Art Department with prior approval of adviser. **Required Supporting Courses 9 cr. hrs.** ANTH 100 Introduction to Anthropology 3 cr. ART/PHIL 310 Philosophy of the Arts 3 cr. ENGL 231 The Short Story 3 cr. ENGL 232 Contemporary Drama 3 cr. ENGL 233 Introduction to Poetry 3 cr. ENGL 234 Modern Novels 3 cr. ENGL 341 European Literature 3 cr. HUM 255 Arts and Ideas I 4 cr. HUM 256 Arts and Ideas II 4 cr. Choose a foreign language course at intermediate or higher level 3 cr. MUS 200 American Music 3 cr. MUS 234 Music History and Literature I 4 cr. MUS 235 Music History and Literature II 4 cr. SCTA 121 Acting I: Basic Techniques 3 cr. SCTA 131 Design for the Theatre 3 cr. SCTA 200 Introduction to Film Studies 3 cr.

### Broad Area Art Major-Liberal Arts

Broad Area Art Major-Liberal Arts: 56 Total Credits (no minor required) Foundation Courses in Art:18 hrs. ART 121 Design Foundation 3 cr. ART 131 Drawing I 3 cr. ART 132 Drawing II 3 cr.

ART 211 Western Art to 1500 3 cr.

ART 212 Art History Since 1500 3 cr. ART 485 Art Seminar 3 cr. Required Courses Major Program: 38 cr. hrs. **Choose 18 credits from:** ART 225 Advertising Design I 3 cr. ART 226 Introduction to Fibers 3 cr. ART 227 Introduction to Clay 3 cr. ART 228 Introduction to Metal 3 cr. ART 229 Introduction to Glass 3 cr. ART 235 Introduction to Black and White Photography 3 cr. ART 236 Introduction to Printmaking 3 cr. ART 238 Introduction to Painting 3 cr. **Choose 17 credits from:** ART 303 Advertising Design II 3 cr. ART 309 Senior Exhibition 1 cr. ART 320 Drawing from the Figure 3 cr. ART 326 Studio-Fibers 3 cr. ART 327 Studio-Clay 3 cr. ART 328 Studio-Metals 3 cr. ART 329 Studio-Glass 3 cr. ART 335 Studio-Photography 3 cr. ART 336 Studio-Printmaking 3 cr. ART 338 Studio-Painting 3 cr. ART 407 Introduction to Art Therapy 3 cr. ART 408 Art Therapy Group Process 3 cr. Additional Art History 3 credits.

#### Broad Area Art Education Major

Education Broad Area Art Major: 59 Total Credits (no minor required) **Foundation Courses in Art:** Liberal Arts choose 24-25 hrs. ART 121 Design Foundation 3 cr. ART 131 Drawing I 3 cr. ART 132 Drawing II 3 cr. ART 211 Western Art to 1500 3 cr. ART 212 Art History Since 1500 3 cr. ART 253 Art in the Schools 4 cr. Additional Art History 2-3 cr. ART 485 Art Seminar 3 cr. Required Courses Major Program: 34 cr. hrs. **Choose 18 credits from:** ART 225 Advertising Design I 3 cr. ART 226 Introduction to Fibers 3 cr. ART 227 Introduction to Clay 3 cr. ART 228 Introduction to Metal 3 cr. ART 229 Introduction to Glass 3 cr. ART 235 Introduction to Black and White Photography 3 cr. ART 236 Introduction to Printmaking 3 cr. ART 238 Introduction to Painting 3 cr. ART 289 Special Topics in Art 3 cr. 14 credits from: ART 303 Advertising Design II 3 cr. ART 309 Gallery Techniques 1-3 cr. ART 320 Drawing from the Figure 3 cr. ART 326 Studio-Fibers 3 cr. ART 327 Studio-Clay 3 cr. ART 328 Studio-Metals 3 cr.

ART 329 Studio-Glass 3 cr. ART 335 Studio-Photography 3 cr. ART 336 Studio-Printmaking 3 cr. ART 338 Studio-Painting 3 cr. ART 389 Special Topics in Art 3 cr. ART 407 Introduction to Art Therapy 3 cr. ART 408 Art Therapy Group Process 3 cr. ART 489 Special Topics in Art 3 cr.

## Art Major-Liberal Arts (with minor or additional major)

#### Major Requirements 36 Total Credits Foundation Courses in Art: 18 cr. hrs.

ART 121 Design Foundation 3 cr. ART 131 Drawing I 3 cr. ART 132 Drawing II 3 cr. ART 211 Western Art to 1500 3 cr. ART 212 Art History Since 1500 3 cr. ART 485 Art Seminar 3 cr. **Required Courses: 18 cr. hrs. Choose 12 credits from:** ART 225 Advertising Design I 3 cr. ART 226 Introduction to Fibers 3 cr. ART 227 Introduction to Clay 3 cr. ART 228 Introduction to Metal 3 cr. ART 229 Introduction to Glass 3 cr. ART 235 Introduction to Black and White Photography 3 cr. ART 236 Introduction to Printmaking 3 cr. ART 238 Introduction to Painting 3 cr. **Choose 6 credits from:** ART 289 Special Topics 3 cr. ART 303 Advertising Design II 3 cr. ART 309 Gallery Techniques 1-3 cr. ART 320 Drawing from the Figure 3 cr. ART 326 Studio-Fibers 3 cr. ART 327 Studio-Clay 3 cr. ART 328 Studio-Metals 3 cr. ART 329 Studio-Glass 3 cr. ART 335 Studio-Photography 3 cr. ART 336 Studio-Printmaking 3 cr. ART 338 Studio-Painting 3 cr. ART 407 Introduction to Art Therapy 3 cr. ART 408 Art Therapy Group Process 3 cr.

### Art Minor

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

Updated April, 2007

## **Biology (BIOL)**

## Department of Biology College of Arts and Sciences

## 414 Agriculture-Science Building (715) 425-3591 www.uwrf.edu/biology/

Karen Klyczek-Chair, Scott Ballantyne, Mark Bergland, Clarke Garry, Elaine Hardwick, Douglas Johnson, Timothy Lyden, E. Katherine Miller, Brad Mogen, Kim Mogen, John Wheeler

The biology department offers a 34-credit major and a 22 credit minor for liberal arts and education majors. A degree with a biology major also requires completion of a minor and additional supporting courses in chemistry, mathematics, and physics. Three options are offered for the biology major: 1) General Biology option, for students who want to be broadly educated in biology or who are seeking life science certification;

2) Biomedical Sciences option, appropriate for preprofessional majors and students planning to go into laboratory research;

3) Field Biology option, for students interested in ecological research or careers in field biology.

General Education Requirements

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

#### Major requirements 34 Total Credits General Biology Option Core Requirements: 21 cr. hrs. BIOL 110 Freshman Colloquium 1 cr. BIOL 150 General Biology 3 cr. BIOL 210 General Botany 3 cr. BIOL 230 General Zoology 3 cr. BIOL 240 Cell and Molecular Biology 3 cr. BIOL 350 Genetics and Evolution (writing intensive) 3 cr. BIOL 360 Ecology (writing intensive) 3 cr. BIOL 410 Senior Colloquium 1 cr. Biology 481 Seminar (Liberal Arts majors) 1 cr. or Biology 471 Lab Experiences (Education majors) Directed Electives: 13 cr. hrs. Choose from any Biology courses except BIOL 100, 253

## Biomedical Sciences Option

Core Requirements: 23 cr. hrs. BIOL 110 Freshman Colloquium 1 cr. BIOL 150 General Biology 3 cr. BIOL 230 General Zoology 3 cr. BIOL 240 Cell and Molecular Biology 3 cr. BIOL 341 Anatomy and Physiology I 4 cr. BIOL 342 Anatomy and Physiology II 4 cr. BIOL 350 Genetics and Evolution (writing intensive) 3 cr. BIOL 410 Senior Colloquium 1 cr. BIOL 481 Seminar 1 cr. Directed Electives: 11 cr. hrs. Choose from the following courses. At least 6 elective credits must be Biology courses. BIOL 235 Comparative Anatomy 4 cr. BIOL 243 Introduction to Biological Greek and Latin 1 cr. BIOL 295 Laboratory Research Experience 2 cr. BIOL 305 Applications in Molecular Biology 3 cr. BIOL 307 Human Heredity 2 cr. BIOL 324 Microbiology 4 cr. BIOL 345 Immunology 3 cr. BIOL 353 Histology 4 cr. BIOL 379 Internship 3-6 cr. BIOL 451 Molecular Biology 4 cr. BIOL 453 Virology 3 cr. BIOL 463 Animal Cell Culture 3 cr. BIOL 495 Undergraduate Research 3 cr. BIOL 499 Independent Study 1-3 cr. ANSC 231 Principles of Nutrition 3 cr. ANSC 447 Endocrinology 2 cr. ANSC 448 Reproductive Physiology 3 cr.

### Field Biology Option

Core Requirements: 17 cr. hrs. BIOL 110 Freshman Colloquium 1 cr. BIOL 150 General Biology 3 cr. BIOL 210 General Botany 3 cr. BIOL 230 General Zoology 3 cr. BIOL 296 Field Research Experience 2 cr. BIOL 360 Ecology (writing intensive) 3 cr. BIOL 410 Senior Colloquium 1 cr. BIOL 481 Seminar 1 cr. Directed Electives: 17 cr. hrs. Choose from the following courses. At least 11 elective credits must be Biology courses. BIOL 240 Cell and Molecular Biology 3 cr. BIOL 243 Introduction to Biological Greek and Latin 1 cr. BIOL 305 Applications in Molecular Biology 3 cr. BIOL 310 Identification of Plants 3 cr. BIOL 314 Plant Pathology 3 cr. BIOL 320 Plant Physiology 3 cr. BIOL 324 Microbiology 4 cr. BIOL 333 Entomology 3 cr. BIOL 344 Wildlife Biology 4 cr. BIOL 350 Genetics and Evolution (writing intensive) 3 cr. BIOL 354 Freshwater Biology 3 cr. BIOL 355 Environmental Law 3 cr. or ESM 303 Environmental Policies and Administration BIOL 379 Internship 3-6 cr.

BIOL 434 Ichthyology 3 cr.
BIOL 434 Ichthyology 3 cr.
BIOL 495 Undergraduate Research 3 cr.
BIOL 499 Independent Study 1-3 cr.
ESM 220 Environmental Sustainability: Theories, Issues, and Management 3 cr.
ESM 333 Remote Sensing of Natural Resources 3 cr.
ESM 343 Woodlot Management 3 cr.
ESM 360 Applied Hydrology and Water Quality 4 cr.
ESM 413 Environmental Analysis 4 cr.
GEOG 250 Cartography I 3 cr.
GEOG 360 Introduction to GIS 3 cr.
GEOL 202 Oceanography 2 cr.
GEOL 269 Environmental Geology 2 cr.
GEOL 445 Hydrogeology 3 cr.

Required Supporting Courses: 21-22 cr. hrs. Required for all options in the biology major. Some professional schools and graduate programs may require additional credits in Chemistry, Math and/or Physics; consult your adviser. CHEM 121,122 General Chemistry I and II 10 cr. PHYS 151,156 or PHYS 161, 101 General Physics I and Lab 4 cr. MATH 147 College Algebra and Trigonometry 3 cr. Liberal Arts majors choose one statistics course: MATH 216 Elementary Statistical Concepts 3 cr. MATH 226 Fundamentals of Statistics 3 cr. MATH 326 Applied Statistics 3 cr. or ANSC 341 Biometrics 3 cr. **Education majors take:** GEOL 101, 102 Introductory Geology and Lab 4 cr.

### **Biology Minor**

#### Minor Requirements 22 Total Credits

**Required Courses:** BIOL 150 General Biology 3 cr. Liberal Arts majors take: BIOL 210 or BIOL230 General Botany or General Zoology 3 cr. Directed Electives: 16 cr. hrs. Choose from any Biology courses except Biol 100, 253. At least one course must be at the 300 level or above. **Education majors take:** BIOL 210 General Botany 3 cr. BIOL 230 General Zoology 3 cr. BIOL 240 Cell and Molecular Biology 3 cr. BIOL 350 Genetics and Evolution (writing intensive) 3 cr. BIOL 360 Ecology (writing intensive) 3 cr. Directed Electives: 4 cr. hrs. Choose from any Biology courses except Biol 100, 253.

Updated March, 2007

## **Biotechnology (BIOT)** Interdisciplinary Program

## 261 Centennial Science Hall (715) 425-3577 www.uwrf.edu/biotech

Lisa C. Kroutil–Director, William Anderson, Scott Ballantyne, Ross Jilk, Tim Lyden, and Gary Onan.

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 30-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 4-10. BS Agriculture, Food and Environmental Sciences majors as listed on pages 1-3.

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

#### Biotechnology Major: 71 Total Credits Core Requirements: 41 cr. hrs.

#### Biology Core 19 cr. hrs.

BIOL 150 General Biology 3 cr.
BIOL 210 General Botany
or BIOL 230 General Zoology 3 cr.
BIOL 240 Cell and Molecular Biology 3 cr.
BIOL 324 Microbiology 4 cr.
BIOL 350 Genetics and Evolution (writing intensive) 3 cr.
BIOL 453 Virology
or BIOL 345 Immunology 3 cr.

#### Chemistry Core 22 cr. hrs.

CHEM 121 General Chemistry I 5 cr. CHEM 122 General Chemistry II 5 cr. CHEM 231 Organic Chemistry I 3 cr. CHEM 232 Organic Chemistry II 3 cr. CHEM 236 Organic Chemistry Lab I 1 cr. CHEM 237 Organic Chemistry Lab II 1 cr. CHEM 251 Analytical Chemistry 2 cr. CHEM 256 Analytical Chemistry Lab 1 cr. CHEM 355 Separation Science Laboratory 1 cr.

#### Interdepartmental Course Requirements 30 cr. hrs. Required Courses 22 cr. hrs.

FDSC 335 Food Microbiology 4 cr. FDSC 460 Fermentation Technology 3 cr. CHEM 361 Biochemistry I 3 cr. CHEM 362 Biochemistry II 3 cr. CHEM 366 Biochemistry Lab (writing intensive) 1 cr. HORT 369 Plant Tissue Culture: Theory and Practice or BIOL 463 Animal Cell Culture 3 cr. BIOL 451 Molecular Biology 4 cr. BIOT 480 Biotechnology Seminar 1 cr. 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. ANSC 231 Principles of Nutrition 3 cr. ANSC 260 Animal Physiology 4 cr. ANSC 341 Biometrics 3 cr. ANSC 346 Principles of Animal Breeding (writing intensive) 3 cr. ANSC 447 Endocrinology 2 cr. ANSC 448 Reproductive Physiology 3 cr. ANSC 490 Independent Study in Animal Science 1-3 cr. **BIOL 210 General Botany** or BIOL 230 General Zoology 3 cr. BIOL 295 Laboratory Research Experience 2 cr. BIOL 314 Plant Pathology 3 cr. BIOL 320 Plant Physiology 3 cr. BIOL 341 Anatomy and Physiology I 4 cr. BIOL 342 Anatomy and Physiology II 4 cr. **BIOL 345 Immunology** or BIOL 453 Virology 3 cr. BIOL 353 Histology 4 cr. BIOL 360 Ecology (writing intensive) 3 cr. BIOL 495 Undergraduate Research 3 cr. BIOL 499 Independent Study 1-3 cr. BIOL 463 Animal Cell Culture or HORT 369 Plant Tissue Culture: Theory and Practice 3 cr. CHEM 295 Introduction to Undergraduate Research 1 cr. CHEM 311 Polymer Chemistry 3 cr. CHEM 340 Physical Chemistry of Biological Systems 3 cr. CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. CHEM 452 Instrumental Analysis 3 cr. CHEM 461 Pharmacology 3 cr. CHEM 495 Undergraduate Research 1 cr. FDSC 110 The Science of Food 3 cr. FDSC 302 Dairy Manufacturing II 3 cr.

FDSC 312 Food Processing 4 cr. FDSC 360 Food Chemistry 3 cr. FDSC 461 Food Analysis 4 cr. FDSC 490 Independent Study in Food Science 1-3 cr. HORT 161 Introduction to Plant Science 3 cr. HORT 169 Introduction to Horticulture 3 cr. HORT 200 Plant Propagation 3 cr. CROP 263 Forage Crop Production 3 cr. CROP 410 Plant Breeding and Crop Improvement (writing intensive) 3 cr. CROP 435 Crop Physiology 4 cr. CROP 490 Independent Study in Agronomy 1-3 cr. ESM 305 Environmental Impact Assessment ESM 412 Chemical Fate and Transport ESM 413 Environmental Analysis

#### Required Supporting Courses 14 cr. hrs.

MATH 166 Calculus I 4 cr.

#### Either sequence A or B below:

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

**B.** PHYS 101 General Physics Laboratory I 1 cr. PHYS 102 General Physics Laboratory II 1 cr. PHYS 161 General Physics I 4 cr. PHYS 162 General Physics II 4 cr.

Updated 08/17/2006

## **Business** Administration

Department of Business Administration College of Business and Economics

## 124 South Hall (715) 425-3335 www.uwrf.edu/cbe/

The vision of the College of Business and Economics is to be the regional leader in the acquisition, application, and transfer of business and economic knowledge. Consistent with this vision, the college has achieved accreditation of its programs by the Association to Advance Collegiate Schools of Business (AACSB) International.

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. Another is to pursue a broad area business administration degree with an option in marketing, management, finance, or management information systems. A minor is not required with the Broad Area Major in Business Administration.

## General Education Requirements

Review the general education requirements 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.

## Admission Requirments

For all majors in the College of Business and Economics: Completion of at least 27 required general education credits with a minimum GPA of 2.25.

Additionally, the following must be completed, or in progress for completion, during the semester preceding admission. Students may register prior to acceptance, but acceptance is required for attendance in CBE upper-level courses. Students with GPAs between 2.0 and 2.25 may petition to the respective department chair for consideration on a case-by-case basis. For admission to Accounting and Business Administration majors:

GPA of 2.25 in ACCT 231, 232; ECON 201, 202; CSIS 215; ECON 205 or MATH 156 or MATH 166; ECON or MATH 226; SCTA 116 or ENGL 266.

## Business Administration Major

#### Business Administration Major: 45 Total Credits (with a minor or double major)

#### Lower Division 21 cr. hrs.

## Required of all majors before enrolling in any upper level division courses.

ECON 201 Principles of Microeconomics 3 cr. ECON 202 Principles of Macroeconomics 3 cr. ACCT 231 Principles of Accounting I 3 cr. ACCT 232 Principles of Accounting II 3 cr. CSIS 215 Information Systems for Business Management 3 cr. ECON 226 Introduction to Statistics 3 cr. or MATH 226 Introduction to Statistics

BLAW 265 Business Law I 3 cr.

#### Upper Division 18 cr. hrs.

MNGT 300 Management and Organizational Behavior 3 cr. MKTG 310 Principles of Marketing 3 cr. FINC 345 Managerial Finance 3 cr. ECON 326 Statistical Methods for Economics and Business 3 cr. MNGT 361 Operations Management 3 cr. MNGT 485 Senior Seminar 3 cr.

#### Business Electives 6 cr. hrs.

Choose 6 credits of courses 300 level or higher from MKTG, MNGT or FINC including FINC 210.

Required Supporting Courses: 9-10 cr.
A. CBE 100 Orientation to CBE 1 cr.
CBE 200 Professonal Development I 1 cr.
CBE 300 Professonal Development II 1 cr.
B. SCTA 116 Business and Professional Communication 3 cr.
(waived if taken as GenEd)
or ENGL 266 Business Writing
C. ECON 205 Quantitative Analysis

or MATH 156 Calculus for Business and Social Sciences or MATH 166 Calculus I

Business-Broad Area Major (with an option, no minor required)

Required courses for all options: Lower and Upper Division Courses listed above 39 cr. hrs.

#### **Required Supporting Courses: 9 cr.**

A. CBE 100 Orientation to CBE 1cr.
CBE 200 Professonal Development I 1 cr.
CBE 300 Professonal Development II 1 cr.
B. SCTA 116 Business and Professional Communication 3 cr.
(waived if taken as GenEd)

or ENGL 266 Business Writing C. ECON 205 Quantitative Analysis or MATH 156 Calculus for Business and Social Sciences or MATH 166 Calculus I

General Electives 12-18 cr. hrs. to reach 120 credits (minimum to graduate)

#### Finance Option 24 cr. hrs.

Required Finance Courses 12 cr. hrs. FINC 347 Financial Institutions 3 cr. FINC 348 Investments 3 cr. FINC 446 Intermediate Managerial Finance 3 cr. Finance Electives: 6 cr. hrs.

#### **Choose from:**

FINC 314 Principles of Insurance 3 cr. ECON 342 International Finance 3 cr. FINC 350 Real Estate 3 cr. FINC 355 Multinational Financial Management 3 cr. FINC 360 Financial Derivatives 3 cr. FINC 389 Special Topics in Finance .5-3 cr. FINC 448 Portfolio Management 3 cr.

#### Support Electives: 6 cr. hrs. Choose from:

FINC 210 Personal Finance 3 cr. FINC 379 Internship-Finance 3 cr. ECON 302 Intermediate Macroeconomics 3 cr. ECON 305 Money and Banking 3 cr. ACCT, MNGT, and MKTG courses 300 level and higher

## Management Option 24 cr. hrs.

Required Management Courses: 9 cr. hrs. **Choose from:** MNGT 320 Human Resource Management 3 cr. MNGT 340 Ethical Leadership 3 cr. MNGT 355 International Business 3 cr. MNGT 430 Small Business Management 3 cr. Management Electives: 6 cr. hrs. **Choose from:** MNGT 318 Operations Research 3 cr. MNGT 320 Human Resource Management 3 cr. MNGT 330 Managing Workplace Diversity 3 cr. MNGT 340 Business Administration 3 cr. MNGT 350 Decision Making 3 cr. MNGT 355 International Business 3 cr. MNGT 365 Business Process Management 3 cr. MNGT 378 Study Abroad 3-6 cr. MNGT 379 Internship 3 cr.

MNGT 380 International Business Seminar 3 cr.

MNGT 389 Special Topics .5-3 cr.

MNGT 430 Small Business Management 3 cr.

MNGT 480 Human Resource Management Seminar 3 cr.

MNGT 499 Independent Study 1-3 cr. **Support Electives: 9 cr. hrs.** Choose supporting courses appropriate to area of interest with approval of adviser.

### Marketing Option 24 cr. hrs.

Required Marketing Courses 9 cr. hrs. MKTG 312 Consumer Behavior 3 cr. MKTG 365 Marketing Research 3 cr. MKTG 445 Marketing Strategy 3 cr. Marketing Electives 6 cr. hrs. **Choose from:** MKTG 325 Sales Effectiveness 3 cr. MKTG 330 Promotion Strategy 3 cr. MKTG 334 Direct Marketing 3 cr. MKTG 352 Business to Business Marketing 3 cr. MKTG 355 International Marketing 3 cr. MKTG 379 Internship-Marketing 3 cr. MKTG 389 Special Topics in Marketing 3 cr. MKTG 499 Independent Study 1-3 cr. MNGT 450 e-Commerce 3 cr. Support Electives: 9 cr. hrs. **Choose from:** ECON 316 Managerial Economics 3 cr. ECON 340 International Trade 3 cr. ECON 342 International Finance 3 cr. ECON 426 Forecasting and Economietrics 3 cr. ESM 377 Business Ecology 3 cr. GEOG 250 Cartography I 3 cr. MNGT 310 Culture and Business 3 cr. MNGT 330 Managing Workplace Diversity 3 cr. MNGT 389 Special Topics in Management, Multi-media .5-3 cr. PHIL 304 Business Ethics 3 cr. POLS 256 Public Policymaking 3 cr. POLS 260 International Relations 3 cr. PSYC 236 Child & Adolescent Development 3 cr. PSYC 265 Social Psychology 3 cr. PSYC 305 Learning and Motivation 3 cr. PSYC 310 Memory and Thinking 3 cr. PSYC 320 Psychology of Personality 3 cr. PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. SCTA 306 Nonverbal Communication 3 cr. SCTA 311 Persuasion 3 cr. SCTA 316 Organizational Communication 3 cr.

## Management Information Systems Option:

24 cr. hrs. **Required courses: 18 cr. hrs.** CSIS 161 Programming I 3 cr. CSIS 162 Programming II 3 cr. CSIS 247 Intro. To Computer Networking 3 cr. CSIS 333 Database Management Systems 3 cr. CSIS 423 System Analysis and Design 3 cr. MNGT 365 Business Process Management 3 cr, Directed Electives: 6 cr. hrs. Choose from:

CSIS 433 System Analysis: MIS 3 cr. CSIS 225 Web Development I 3 cr. CSIS 379 Internship in Computer Science 3 cr. CSIS 325 Web Development II 3 cr. MNGT 318 Operations Research 3 cr. MNGT 320 Human Resource Management 3 cr. MNGT 379 Internship in Management 3 cr. MNGT 450 E-Commerce 3 cr. MKTG 352 Business to Business Marketing 3 cr.

#### **Business Administration Minor**

### Business Administration Minor: 24 Total Credits

### (Prerequisites: ECON 201, 202, 226 or Math 226) Required Courses 18 cr. hrs.

ACCT201 Survey of Accounting 3 cr. (or ACCT231 and ACCT232, Principles of Accounting I and II) BLAW 265 Business Law I 3 cr. hrs. CSIS 215 Information Systems for Business Management 3 cr. FINC 345 Managerial Finance 3 cr. MNGT 300 Management and Organizational Behavior 3 cr. MKTG 310 Principles of Marketing 3 cr.

#### **Business Electives: 6 cr. hrs.**

Courses 300 level or higher from MKTG, MNGT or FINC, including FINC 210

Updated March, 2007

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

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

Jeff Rosenthal-Chair, Marilyn Duerst, Ross Jilk, Mike Kahlow, Sheue Keenan, Lisa Kroutil, Daniel Marchand, Kevin McLaughlin, Barb Nielsen, Magdalena Pala, Karl Peterson, David Rainville, 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. In order to be admitted to the College of Education, the student needs to be evaluated and recommended by the Chemistry Education Advisory Committee. Contact the Chemistry Department chair for further information. 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 UWRF. Students should confer with their advisor and/or the department chair.

The Department of Chemistry at UWRF 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

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.

## Chemistry Major Core Requirements

## **Core Requirements for All Chemistry Major Programs:** 21-22 cr. hrs.

CHEM 121 General Chemistry I 5 cr. or CHEM 120 Introduction to General Chemistry 6 cr. CHEM 122 General Chemistry II 5 cr. CHEM 231 Organic Chemistry I 3 cr. CHEM 232 Organic Chemistry II 3 cr. CHEM 251 Analytical Chemistry 2 cr. CHEM 256 Analytical Chemistry Lab 1 cr. CHEM 355 Separation Science Laboratory 1 cr. CHEM 480 Chemical Communications and Research (writing intensive) 1 cr. **Required Supporting Courses: 14-21 cr. hrs.** MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. MATH 266 Calculus III 3 cr. Choose one of the following two physics series A. or B.: 10 cr. hrs. (Option B is required for ACS-approved options) 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: 35-38 Total

Credits

Core Requirements 21-22 cr. hrs. **Required Supporting Courses 14-21 cr. hrs.** (not counted in total for major) **Regular Option Required Courses: 11 cr. hrs.** CHEM 236 Organic Chemistry Lab I 1 cr. CHEM 237 Organic Chemistry Lab II 1 cr. CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. CHEM 342 Molecular Structure and Spectroscopy 3 cr. CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. Directed Electives for the Regular Option: 3 cr. hrs. **Choose from:** CHEM 311 Polymer Chemistry 3 cr. CHEM 361 Biochemistry I 3 cr. CHEM 411 Polymer Science 3 cr. CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. CHEM 432 Advanced Organic Chemistry 3 cr. CHEM 461 Pharmacology 3 cr. CHEM 495 Undergraduate Research 1 cr.

## Biochemistry Option

Required Courses: 16 cr. hrs.

CHEM 236 Organic Chemistry Lab I 1 cr. CHEM 237 Organic Chemistry Lab II 1 cr.

CHEM 361 Biochemistry I 3 cr.

CHEM 362 Biochemistry II 3 cr.

CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr.

CHEM 495 Undergraduate Research 1 cr.

#### 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. BIOL 350 Genetics and Evolution (writing intensive) 3 cr.

Chemistry Major- Education

Major Requirements - Secondary Education 35-36 Total Credits Core Requirements: 21-22 cr. hrs. Required Supporting Courses: 21 cr. hrs. (not counted in total for major)

#### Secondary Education Option Required Courses: 14 cr. hrs.

CHEM 236 Organic Chemistry Lab I 1 cr.
CHEM 237 Organic Chemistry Lab II 1 cr.
CHEM 341 Chemical Thermodynamics and Kinetics 3 cr.
CHEM 342 Molecular Structure and Spectroscopy 3 cr.
CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr.
CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr.
CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr.
CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr.

## Chemistry Major ACS-Approved

## Chemistry Major ACS-Approved: 42-48

Total Credits Core Requirements 21-22 cr. hrs. Required Supporting Courses 21 cr. hrs. (not counted in total for major)

## ACS Regular Option

Required Courses: 19 cr. hrs. CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. CHEM 342 Molecular Structure and Spectroscopy 3 cr. CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. CHEM 361 Biochemistry I 3 cr. CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr. CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr. CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. CHEM 495 Undergraduate Research 1 cr. Directed Electives for the Regular Option 3 cr. hrs. **Choose from:** CHEM 311 Polymer Chemistry 3 cr. CHEM 362 Biochemistry II 3 cr. CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. CHEM 411 Polymer Science 3 cr. CHEM 416 Polymer Laboratory 1 cr. CHEM 432 Advanced Organic Chemistry 3 cr. CHEM 489 Special Topics in Chemistry .5-3 cr.

## ACS Biochemistry Option

**Required Courses: 21 cr. hrs.** CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr.

CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. CHEM 342 Molecular Structure and Spectroscopy 3 cr. CHEM 356 Chemical Instrumentation Lab (writing

intensive) 1 cr.

CHEM 361 Biochemistry I 3 cr.

CHEM 362 Biochemistry II 3 cr.

CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr.

CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr.

CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr.

## Additional required supporting courses, biochemistry option only: 10 cr. hrs.

BIOL 240 Cell and Molecular Biology 3 cr.

BIOL 350 Genetics and Evolution (writing intensive) 3 cr. BIOL 451 Molecular Biology 4 cr.

### **ACS** Polymer Option

Required Courses: 26-27 cr. hrs. Option I

CHEM 236 Organic Chemistry Lab I 1 cr.

CHEM 237 Organic Chemistry Lab II 1 cr.

CHEM 311 Polymer Chemistry 3 cr.

CHEM 341 Chemical Thermodynamics and Kinetics 3 cr.

CHEM 342 Molecular Structure and Spectroscopy 3 cr. CHEM 356 Chemical Instrumentation Lab (writing

intensive) 1 cr.

CHEM 361 Biochemistry I 3 cr.

CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr.

or CHEM 495 Undergraduate Research

CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr.

CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr.

CHEM 411 Polymer Science 3 cr.

CHEM 416 Polymer Laboratory 1 cr.

CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr.

CHEM 495 Undergraduate Research 1 cr.

#### **Option II**

CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr.

CHEM 247 Synthetic and Analytical Techniquesin Organic Chem II 1 cr.

CHEM 311 Polymer Chemistry 3 cr.

CHEM 341 Chemical Thermodynamics and Kinetics 3 cr.

CHEM 342 Molecular Structure and Spectroscopy 3 cr.

CHEM 356 Chemical Instrumentation Lab (writing

intensive) 1 cr.

CHEM 361 Biochemistry I 3 cr.

CHEM 401 Advanced Chemistry Lab I (writing intensive) 1 cr.

CHEM 402 Advanced Chemistry Lab II (writing intensive) 1 cr.

CHEM 411 Polymer Science 3 cr.

CHEM 416 Polymer Laboratory 1 cr.

CHEM 422 Advanced Inorganic Chemistry (writing

intensive) 3 cr. CHEM 495 Undergraduate Research 1 cr.

## 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 29-30 cr. hrs. CHEM 121 General Chemistry I 5 cr. or CHEM 120 Introduction to General Chemistry 6 cr. CHEM 122 General Chemistry II 5 cr. CHEM 231 Organic Chemistry I 3 cr. CHEM 232 Organic Chemistry II 3 cr. CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. CHEM 247 Synthetic and Analytical Techniques in Organic Chem II 1 cr. CHEM 251 Analytical Chemistry 2 cr. CHEM 256 Analytical Chemistry Lab 1 cr. CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. CHEM 342 Molecular Structure and Spectroscopy 3 cr. CHEM 355 Separation Science Laboratory 1 cr. Credits transferred from Engineering School 30 cr. hrs. Required supporting courses at UWRF 34 cr. hrs. PHYS 101 General Physics Laboratory I 1 cr. PHYS 102 General Physics Laboratory II 1 cr. PHYS 161 General Physics I 4 cr. PHYS 162 General Physics II 4 cr. PHYS 211 Scientific Programming 3 cr. PHYS 264 General Physics 4 cr. MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. MATH 256 Linear Algebra 3 cr. MATH 266 Calculus III 3 cr. MATH 331 Differential Equations 3 cr.

## Chemistry Minor

Liberal Arts and Education Minor: 22-25 **Total Credits** Required Courses: 10-11 cr. hrs. CHEM 121 General Chemistry I 5 cr. or CHEM 120 Introduction to General Chemistry 6 cr. CHEM 122 General Chemistry II 5 cr. 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. CHEM 232 Organic Chemistry II 3 cr. CHEM 236 Organic Chemistry Lab I 1 cr. CHEM 237 Organic Chemistry Lab II 1 cr. CHEM 246 Synthetic and Analytical Techniques in Organic Chem I 2 cr. CHEM 247 Synthetic and Analytical Techniques in Organic

Chem II 1 cr. CHEM 251 Analytical Chemistry 2 cr. CHEM 256 Analytical Chemistry Lab 1 cr. CHEM 311 Polymer Chemistry 3 cr. CHEM 340 Physical Chemistry of Biological Systems 3 cr. CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. CHEM 342 Molecular Structure and Spectroscopy 3 cr. CHEM 355 Separation Science Laboratory 1 cr. CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. CHEM 361 Biochemistry I 3 cr. CHEM 362 Biochemistry II 3 cr. CHEM 366 Biochemistry Laboratory (writing intensive) 1 cr. CHEM 411 Polymer Science 3 cr. CHEM 416 Polymer Laboratory 1 cr. CHEM 422 Advanced Inorganic Chemistry (writing intensive) 3 cr. CHEM 432 Advanced Organic Chemistry 3 cr. CHEM 452 Instrumental Analysis 3 cr. CHEM 461 Pharmacology 3 cr. CHEM 495 Undergraduate Research 1 cr.

Updated March 2007

## Coaching

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

111 Karges Center (715) 425-3705 www.uwrf.edu/hhp/

Chair–Faye Perkins, Debra Allyn, Jenn Berna, Richard Bowen, Martha Brennan, Kevin Bullis, Dean Culpepper, Gary Eloranta, Patti Ford, Steve Freeman, Bill Henderson, Cindy Hovet, Crystal Lanning, John O'Grady, Robert Ritzer, Jim Tangen-Foster, Sue Tarr, Karla Zhe

## **Coaching Minor**

#### Minor Requirements 24 Total Credits Required Courses: 18 cr. hrs. SFED 200 First Aid and Basic Life Support 2 cr. HEAL 262 Human Anatomy and Physiology 3 cr. (or HEAL 263 and 366) PED 213 Care and Prevention of Athletic Injury 2 cr. PED 354 Biomechanics 3 cr. PED 363 Psychology of Coaching 3 cr. PED 465 Scientific Principles of Conditioning 2 cr. PED 472 Coaching Practicum 3 cr. Coaching Theory Classes: 6 cr. hrs. Required to take at least two coaching theory classes. PED 352 Coaching Women's Gymnastics 2 cr. PED 356 Tennis Coaching 2 cr. PED 358 Track Coaching 2 cr. PED 359 Volleyball Coaching 2 cr. PED 364 Wrestling Coaching 2 cr. PED 365 Football Coaching 2 cr. PED 366 Swimming Coaching 2 cr. PED 367 Basketball Coaching 2 cr. PED 368 Ice Hockey Coaching 2 cr. PED 369 Baseball/Softball Coaching 2 cr. 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. PED 167 Basketball Officiating 1 cr. PED 270 Athletic Training Practicum 2 cr. PED 351 Coaching Young Athletes 2 cr.

Non-education majors are required to take PSYC 236 and 336.

Updated 06/07/2006

## Communicative Disorders (COMD)

Department of Communicative Disorders College of Education and Professional Studies

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

Mike Harris–Chair, Gary Cottrell, Naomi Hashimoto, Sharyl Samargia, Sarah Smits, Elizabeth Troester General Education Requirements Communicative Disorders Major

### Liberal Arts and Education: 39 Total Credits

Required Courses: 36 cr. hrs. COMD 160 Introduction to Communicative Disorders 3 cr. COMD 261 Language Development 4 cr. COMD 262 Speech Systems 4 cr. COMD 263 Phonetics 3 cr. COMD 264 Speech Science 3 cr. COMD 275 Practicum: Observation/Discussion 1 cr. COMD 350 Articulatory and Phonological Disorders 3 cr. COMD 360 Introduction to Audiology 3 cr. COMD 362 Language Appraisal and Intervention 3 cr. COMD 375 Clinical Procedures (writing intensive) 2 cr. COMD 460 Voice Disorders 3 cr.

COMD 463 Behavior Modification/Stuttering 3 cr. COMD 466 Aural Rehabilitation 3 cr.

COMD 379 Clinical Experience Internship 1 cr. **Electives:** 

COMD 162 Introduction to American Sign Language 3 cr. COMD 469 American Sign Language 3 cr.

## Professional Education Requirements: 26 cr. hrs.

TED 211 Educational Psychology: Elementary Education 5 cr.

TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr.

or TED 461 The Psychology and Pedagogy of Literacy 3 cr. TED 439 Techniques of Middle/Secondary Education:

Communicative Disorders 3 cr.

TED 475 Student Teaching: K-12 1-12 cr. PSYC 330 The Exceptional Child 3 cr.

## Communicative Disorders Minor

## Three different emphases 22 Total Credits Required Courses: 4 cr. hrs.

COMD 160 Introduction to Communicative Disorders 3 cr. or COMD 163 Comm Disorders for Elementary Teacher (School Age Emphasis) COMD 275 Practicum: Observation/Discussing 1 cr. 1. Early Childhood Emphasis: 9 cr. hrs. COMD Electives-Choose 3 courses from: COMD 261 Language Development 4 cr. COMD 262 Speech Systems 4 cr. COMD 263 Phonetics 3 cr. COMD 350 Articulatory and Phonological Disorders 3 cr. COMD 360 Introduction to Audiology 3 cr. COMD 362 Language Appraisal and Intervention 3 cr. COMD 466 Aural Rehabilitation 3 cr. Early Childhood Directed Electives: 9 cr. hrs. **Choose 3 courses from:** ENGL 250 Literature for Children 3 cr. ENGL 322 Acquisition of Language 3 cr. PSYC 201 Behavioral Statistics 3 cr. PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. PSYC 260 Behavior Modification 3 cr. PSYC 305 Learning and Motivation 3 cr. PSYC 310 Memory and Thinking 3 cr. PSYC 315 Psychological Measurement and Evaluation 3 cr. SCTA 207 Listening Skills 3 cr. TED 225 Developmental Learning Experiences of Young Children 3 cr. TED 255 Reading Guidance for Children 3 cr. TED 330 Infant Toddler Development 3 cr. 2. School Age Emphasis 9 cr. hrs. COMD Electives-Choose 3 courses from:

COMD 261 Language Development 4 cr. COMD 262 Speech Systems 4 cr. COMD 263 Phonetics 3 cr. COMD 350 Articulatory and Phonological Disorders 3 cr. COMD 360 Introduction to Audiology 3 cr. COMD 362 Language Appraisal and Intervention 3 cr. COMD 460 Voice Disorders 3 cr. COMD 463 Behavior Modification/Stuttering 3 cr. COMD 466 Aural Rehabilitation 3 cr. School Age Directed Electives: 9 cr. hrs. **Choose 3 courses from:** COUN 410 Introduction to Counseling 3 cr. ENGL 250 Literature for Children 3 cr. ENGL 322 Acquisition of Language 3 cr. ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. PSYC 201 Behavioral Statistics 3 cr. PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. PSYC 260 Behavior Modification 3 cr. PSYC 305 Learning and Motivation 3 cr. SCTA 207 Listening Skills 3 cr. SCTA 222 Voice and Articulation 3 cr. TED 255 Reading Guidance for Children 3 cr.

PSYC 420 Introduction to Learning Disabilities 3 cr. TED 461 The Psychology and Pedagogy of Literacy 3 cr. Directed electives that are applicable for Learning Disability certification are COMD 461, PSYC 420 and TED 461

#### 3. Adult Emphasis 9 cr. hrs.

COMD Electives-Choose 3 courses from: COMD 262 Speech Systems 4 cr. COMD 263 Phonetics 3 cr. COMD 350 Articulatory and Phonological Disorders 3 cr. COMD 360 Introduction to Audiology 3 cr. COMD 451 Augmentative/Alternative Communication Systems 3 cr. COMD 452 Dysphagia/Rehabilitation 3 cr. COMD 460 Voice Disorders 3 cr. COMD 463 Behavior Modification/Stuttering 3 cr. **Adult Directed Electives: 9 credits Choose 3 courses from:** COUN 410 Introduction to Counseling 3 cr. ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. PSYC 201 Behavioral Statistics 3 cr. PSYC 260 Behavior Modification 3 cr. PSYC 305 Learning and Motivation 3 cr. PSYC 310 Memory and Thinking 3 cr. PSYC 315 Psychological Measurement and Evaluation 3 cr. PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. SCTA 207 Listening Skills 3 cr. SCTA 222 Voice and Articulation 3 cr. SCTA 306 Nonverbal Communication 3 cr. SOCI 315 Sociology of Later Life 3 cr. SOCI 300 Research Methods (writing intensive) 3 cr. or SOWK 300 Research Methods

#### **Related Resource: Campus Disability Services.**

Updated March, 2007

## **Computer Science and Information Systems** (CSIS)

Department of Computer Science and Information Systems College of Business and Economics

124 South Hall (715) 425-3335 www.uwrf.edu/csis

Ahmad Abuhejleh-Chair, Arpan Jani, Hossein Najafi, Anthony Varghese, Ellen Schultz-Academic adviser General Education Requirements Admission Requirements

The vision of the College of Business and Economics is to be the regional leader in the acquisition, application, and transfer of business and economic knowledge. Consistent with this vision, the college has achieved accreditation of its programs by the Association to Advance Collegiate Schools of Business (AACSB) International.

For all majors in the College of Business and Economics: Completion of at least 27 required general education credits with a minimum GPA of 2.25.

Additionally, the following must be completed, or in progress for completion, during the semester preceding admission. Students may register prior to acceptance, but acceptance is required for attendance in CBE upper-level courses. Students with GPAs between 2.0 and 2.25 may petition to the respective department chair for consideration on a case-by-case basis.

For admission to the CSIS majors: GPA of 2.25 in CSIS 161, 162 and 237.

## Computer Science and Information Systems Major

Computer Science Option: 37 Total Credits This option has a technical and theoretical emphasis

providing students with a comprehensive understanding of software engineering, computing techniques and the underlying theories. Graduates will develop skills relevant to the analysis, design and implementation of sophisticated software/hardware systems and communication networks. Required Courses: 25 cr. hrs.

CSIS 161 Programming I 3 cr.

CSIS 162 Programming II 3 cr. CSIS 237 Data Structure and Algorithm 3 cr. CSIS 247 Introduction to Computer Networks 3 cr. CSIS 333 Database Management Systems 3 cr. CSIS 343 Software Engineering 3 cr. CSIS 355 Computer Organization and Assembly Language 3 cr. CSIS 429 Operating Systems 3 cr.

CSIS 484 Seminar (writing intensive) 1 cr.

Directed Electives: 12 cr. hrs. To be selected from 200-400 CSIS courses in consultation with adviser.

Required supporting math courses: 11 cr. hrs.

Math 166, 236, 256 or 361 or 366 CBE 100; CBE 200 and CBE 300 3cr.

## Computer Information Systems Option: 37 **Total Credits**

The analysis and design of information systems with an emphasis on managing, storing, transmitting and providing ready access to information is the key to the CIS option. Graduates will develop skills relevant to the analysis, design and implementation of sophisticated information systems.

#### Required Courses: 25 cr. hrs.

CSIS 161 Programming I 3 cr.

CSIS 162 Programming II 3 cr. CSIS 237 Data Structure and Algorithm 3 cr.

CSIS 247 Introduction to Computer Networks 3 cr.

CSIS 333 Database Management Systems 3 cr.

CSIS 355 Computer Organization and Assembly Language 3 cr.

CSIS 423 Introduction to System Analysis I 3 cr.

CSIS 433 Design Analysis MIS 3 cr.

CSIS 484 Seminar (writing intensive) 1 cr.

Directed Electives: 12 cr. hrs.

To be selected from 200-400 CSIS courses in consultation with adviser.

Required supporting courses: 10-11 cr. hrs.

MATH 156 or 166, 236. 7-8 cr. hrs. CBE 100; CBE 200 and CBE 300 3cr.

## Computer Science and Information Systems Minor

#### Computer Science Option: 24 Total Credits Required courses 18 cr. hrs.

CSIS 161 Programming I 3 cr. CSIS 162 Programming II 3 cr. CSIS 237 Data Structure and Algorithm 3 cr. CSIS 247 Introduction to Computer Networks 3 cr. CSIS 333 Database Management Systems 3 cr. CSIS 355 Computer Organization and Assembly Langauge 3 cr. Directed electives 6 cr. hrs.

To be selected from 200-400 CSIS courses in consultation with adviser.

Required supporting math courses: 8 cr. hrs. MATH 166, 236

## Information Systems Option: 24 Total

### Credits

Required courses 18 cr. hrs.
CSIS 161 Programming I 3 cr.
CSIS 162 Programming II 3 cr.
CSIS 237 Data Structure and Algorithm 3 cr.
CSIS 247 Introduction to Computer Networks 3 cr.
CSIS 333 Database Management Systems 3 cr.
CSIS 423 Introduction to Systems Analysis 3 cr.
Directed electives 6 cr. hrs.
To be selected from 200-400 CSIS courses in consultation with adviser.
Required supporting math courses: 7-8 cr. hrs.
MATH 156 or 166, 236

Updated March 2007

## **Conservation**

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

## 324 Agriculture Science Hall (715) 425-3345 www.uwrf.edu/pes/

Terry L. Ferriss-Chair, William A. Anderson, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove, Michael Crotser, Michael C. Kaltenberg, Kerry L. Keen, Michael D. Middleton, Eric M. Sanden, Brian R. Smith, Donavon H. Taylor, Laine Vignona, Susan J. Wiegrefe, Ian S. Williams.

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

#### **General Education Requirements**

Ethical Citizenship: ESM 105 required Sciences: GEOL 101 and BIOL 150 required.

### **Conservation Major**

#### Conservation Core 47-49 cr. hrs. ESM 109 Introduction to Forestry 2 cr. ESM 151 Introduction to Land Use Theory and Practice 3 cr. ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. ESM 270 Internship I 2-4 cr. ESM 303 Environmental Policies and Administration 3 cr. ESM 333 Remote Sensing of Natural Resources 3 cr. ESM 343 Woodlot Management 3 cr. ESM 360 Applied Hydrology and Water Quality 4 cr. ESM 363 GIS Application in Resource Management 3 cr. ESM 485 Seminar in Resource Management 1 cr. SOIL 210 Introductory Soil Science 3 cr. SOIL 440 Soil and Water Conservation 4 cr. AGEC 450 Introduction to Natural Resource Economics 3 cr. BIOL 344 Wildlife Biology 4 cr. BIOL 360 Ecology 3 cr. BIOL 210 General Botany 3 cr. or BIOL 230 General Zoology

#### **Required Supporting Courses 14 cr. hrs.**

GEOG 250 Introduction to Cartography and GIS 3 cr. ENGL 266 Business Writing or ENGL 367 Technical Writing 3 cr. AGEC 230 Agriculture Economics I 3 cr. or ECON 201 Principles of Microeconomics CHEM 120 Introduction to General Chemistry 6 cr. or CHEM 121 General Chemistry 1 5cr. Directed Electives: 11-13 cr. hrs. ACCT 201, 231, 232, AGEC 320, 345, AGED 202, AGEN

325, 333, 365, CROP 345, 462, ANSC 231, 257, 260, BIOL 240, 310 320, 324, 330, 333, 350, 354, 355, 434, 444, BLAW 265, CHEM 122, 200, 230, 251, 256, 356, 452, CJ 202, 320, 322, 376, 430, ECON 202, 205, ESM 289, 300, 305, 307, 365, 370, 377, 411, 413, 435, 490, FINC 210, 345, GENG 235, GEOG 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 ECON 226; MATH 226 or ANSC 341 General Electives: 6 cr. hrs.

### **Conservation Minor**

### **Conservation Minor: 22 Total Credits**

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

Updated March 2007

## **Criminal Justice (CJ)**

## Department of Sociology, Anthropology, and Criminal Justice

College of Arts and Sciences

326 Kleinpell Fine Arts Building (715) 425-3992 www.uwrf.edu/sociology/

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

Criminal Justice Minor with Sociology Major

## 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. CJ 320 Juvenile Delinquency 3 cr. CJ 322 Criminology 3 cr. CJ 430 Trends and Issues in Incarceration 3 cr. or CJ 435 Alternatives to Incarceration Directed Electives: 12 cr. hrs. CJ 376 Criminal Justice Certification Internship 6 cr. or CJ 379 Criminal Justice Internship 6-12 cr. **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. CJ 310 Gangs in the U.S. 3 cr. SOCI 340 Sociology of Rural Life 3 cr. SOCI 345 Sociology of Urban Life 3 cr. SOCI 445 Power and Inequality 3 cr. PSYC 325 Abnormal Psychology 3 cr. POLS 225 Introduction to Public Administration 3 cr. POLS 253 State and Local Politics 3 cr. POLS 354 Women and the Law 3 cr. POLS 416 Constitutional Law 3 cr.

### Minor in Criminal Justice-NonSociology 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. CJ 202 Introduction to Criminal Justice 3 cr. CJ 320 Juvenile Delinquency 3 cr. CJ 322 Criminology 3 cr. CJ 430 Trends and Issues in Incarceration 3 cr. or CJ 435 Alternatives to Incarceration SOCI 445 Power and Inequality 3 cr. Directed Electives: 6 cr. hrs. SOCI 208 Sociology of Diversity 3 cr. SOCI 225 Sociology of Race and Ethnicity 3 cr. or ANTH 225 Sociology of Race and Ethnicity SOCI 218 Deviant Behavior 3 cr. SOCI 240 Social Problems 3 cr. CJ 310 Gangs in the U.S. 3 cr. SOCI 330 Social Organizations 3 cr. CJ 376 Law Enforcement Certification Internship 6 cr. CJ 379 Criminal Justice Internship 6-12 cr. SOCI 410 Social Psychology 3 cr.

## **Crops and Soils**

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

## 324 Agriculture Science Hall (715) 425-3345 www.uwrf.edu/pes/

Terry L. Ferriss-Chair, William A. Anderson, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove, Michael Crotser, Michael C. Kaltenberg, Kerry L. Keen, Michael D. Middleton, Eric M. Sanden, Brian R. Smith, Donavon H. Taylor, Laine Vignona, Susan J. Wiegrefe, Ian Williams

Three options exist for students who select the Crop and Soil Science major: 1) Crop Science, 2) Soil Science, and 3) Sustainable Agriculture. The Crop Science option is designed for students who wish to focus their studies on plants and the use of plants for food, feed and fiber. Students learn about crop management, biotechnology, crop physiology, crop quality, as well as genetics and plant breeding. The Soil Science option is designed for those whose interests include the basic components and properties of soils, soil conservation, soil fertility, soil hydrology, and the management of soils to produce crops in a sustainable way. The Sustainable Agriculture option is the study of economically viable production systems that promote land productivity, energy efficiency, environmental stewardship, and rural community viability.

## Total Credits Required for Degree: 120

## General Education Requirements

New, first-year students who are candidates for the bachelor's degree and who have matriculated after September 1, 2005, must fulfill the new General Education program regulations as set forth in the Addendum to the Undergraduate Catalog.

The following general education courses are required in the major: MATH 146 or equivalent, CHEM 121, ENGL 100, ENGL 200, BIOL 150, P ED 108, as well as the student's choice of SCTA 101 or SCTA 116. University Requirements

Students must complete a three-credit course related to American Cultural Diversity (the University D requirement), as well as a three-credit course related to Global Perspectives (the University G requirement). Crop and Soil Science Major

## Foundation Courses in Agriculture 12 cr.

hrs.

CROP 161 Introduction to Plant Science 3 cr. SOIL 210 Introductory Soil Science 3 cr. AGEC 230 Agricultural Economics I 3 cr. **Select one from:** AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. ANSC 111 Introduction to Animal Science 3 cr. FDSC 110 The Science of Food 3 cr.

### Major Requirements 64 Total Credits Required Courses: 14 cr. hrs.

CROP 263 Forage Crop Production 3 cr. CROP 266 Crop and Soybean Production 3 cr. SOIL 311 Soil Fertility 4 cr. SOIL 440 Soil and Water Conservation 4 cr. **Options (choose one):** 

## Crop Science Option 43-45 cr. hrs.

CROP 257 Genetics 3 cr. CROP 260 Plant and Seed Identification 2 cr. CROP 345 Weed Control 3 cr. CROP 410 Plant Breeding and Crop Improvement 3 cr. CROP 435 Crop Physiology 4 cr. CROP 451 Integrated Pest Management 3 cr. CROP 485 Seminar in Agronomy 1 cr. ANSC 222 Introduction to Biotechnology 2 cr. ANSC 341 Biometrics 3 cr. AGBI 251 Agricultural Biochemistry 3 cr. AGBI 252 Agricultural Biochemistry Laboratory Techniques 1 cr. BIOL 314 Plant Pathology 3 cr. BIOL 333 Entomology 3 cr. CHEM 230 General Organic Chemistry 3 cr. Select one course from the following: AGEC 355 Agricultural Marketing and Production 3 cr. AGEC 360 Farm Management 3 cr. AGEC 365 Agricultural Finance 3 cr. AGEC 410 Professional Selling 3 cr. Directed Electives 6-16 cr. hrs. (consult with crop science faculty for courses)

### Soil Science Option 38-42 cr. hrs.

SOIL 325 Hydric Soils and Wetland Environments 3 cr.
SOIL 350 Pedology 4 cr.
SOIL 460 Soil Physics 3 cr.
CHEM 122 General Chemistry II 5 cr.
GEOL 102 Introductory Geology Lab 1 cr.
GEOL 327 Geomorphology and Glacial Geology 4 cr.
ESM 360 Applied Hydrology and Water Quality 4 cr.
ENGL 367 Technical Writing 3 cr.
CROP 485 Seminar in Agronomy 1 cr.
Select two courses from the following:
CROP 267 Small Grain and Miscellaneous Crop Production

#### 3 cr.

CROP 345 Weed Control 3 cr. CROP 363 Pasture Management 2 cr. CROP 368 Sustainable Agriculture 3 cr. CROP 435 Crop Physiology 4 cr. CROP 451 Integrated Pest Management 3 cr. ESM 305 Environmental Impact Assessment 2 cr. ESM 412 Fate and Transport of Chemicals in the Environment 3 cr. ESM 413 Environmental Analysis 4 cr. GEOL 417 Hazardous Waste Operation and Emergency Response 2 cr. GEOL 445 Hydrogeology 4 cr. Select two courses from the following: AGEN 363 Precision Agriculture Technology 3 cr. ANSC 341 Biometrics 3 cr. ESM 333 Remote Sensing of Natural Resources 3 cr. ESM 363 GIS Applications in Resource Management 3 cr. GENG 235 Surveying 3 cr. GENG 236 Advanced Surveying 3 cr. GEOG 250 Intro Cartography and GIS 3 cr. GEOG 360 GIS: Theory and Methods 3 cr.

### Sustainable Agriculture Option 45-48 cr.

hrs.

ESM 105 Introduction to Environmental Studies 3 cr. SOCI 340 Sociology of Rural Life 3 cr. AGEC 250 World Food and Population 3 cr. CROP 368 Sustainable Agriculture 3 cr. ESM 220 Environmental Sustainability: Theories, Issues and Management 3 cr. CROP 486 Organic Food Production Systems 3 cr. CROP 451 Integrated Pest Management 3 cr. CROP/HORT 222 Practicum in Community Gardening 3 cr. or CROP/HORT/ANSC/FDSC/AGEN 270 Internship 4 cr. Select two courses of the following: AGEN 325 Alternative Energy Systems 3 cr. HORT 169: Introduction to Horticulture 3 cr. HORT 327 Vegetable Science and Production 4 cr. HORT 347 Fruit Science and Production 4 cr. CROP 260 Plant and Seed Identification 2 cr. CROP 363 Pasture Management 2 cr. CROP 345 Weed Control 3 cr. CROP 410 Plant Breeding and Crop Improvement 3 cr. BIOL 314 Plant Pathology 3 cr. BIOL 333 Entomology 3 cr. ANSC/FDSC 238 Meat and Meat Products 3 cr. FDSC 259 Cereal Technology 3 cr. CROP/ANSC 257 Genetics 3 cr. ANSC 231 Principles of Nutrition 3 cr. ANSC 232 Applied Feeds and Feeding 3 cr. ANSC 365 Poultry Production 3 cr. ANSC 366 Swine Production 3 cr. ANSC 367 Beef Production 3 cr. ANSC 368 Sheep Production 3 cr. ANSC 369 Equine Production 3 cr Select two courses of the following: AGEC 240: Cooperatives 3 cr. AGEC 355 Agricultural Marketing and Prices 3 cr.

AGEC 360: Farm Management 3 cr. AGEC 361 Horticulture Business Management 3 cr. AGEC 450: Introduction to Natural Resource Economics 3 cr AGEC 495 Direct Marketing 3 cr. AGEC 410 Professional Selling 3 cr. PHIL 304 Business Ethics 3 cr. POLS 256 Public Policymaking 3 cr. SOCI 245 Environmental Sociology 3 cr. Select two courses of the following: AGED 202 Leadership and Group Dynamics 3 cr. ESM 151 Introduction to Land Use Theory and Practice 3 cr. ESM 307 Multicultural Perspectives on the Environment 3 cr. GEOG 120 Human Geography 3 cr. GEOG 214 World Patterns of Plants and Animals 3 cr. GEOG 220 Economic Geography 3 cr. PHIL 240 Social Ethics 3 cr. PHIL 303 Environmental Ethics 3 cr.

## Crop Science Minor

Electives 4-6 cr

#### Minor Requirements 24 Total Credits Required Courses: 18 cr. hrs.

CROP 161 Introduction to Plant Science 3 cr.
CROP 260 Plant and Seed Identification 2 cr.
CROP 263 Forage Crop Production 3 cr.
CROP 266 Corn and Soybean Production (writing intensive) 3 cr.
SOIL 210 Introductory Soil Science 3 cr.
SOIL 311 Soil Fertility 4 cr.
Directed Electives: 4 cr. hrs.

### (consult with crop science faculty for courses)

## Soil Science Minor

#### Choose from the following: 22 Total Credits

SOIL 210 Introductory Soil Science 3 cr.
SOIL 311 Soil Fertility 4 cr.
SOIL 325 Hydric Soils and Wetland Environments 3 cr.
SOIL 350 Pedology 4 cr.
SOIL 440 Soil and Water Conservation 4 cr.
SOIL 460 Soil Physics 3 cr.
GEOL 102 Introductory Geology Lab 1 cr.
GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr.

Updated March, 2007

## **Dairy Science (DASC)**

## Department of Animal and Food Science College of Agriculture, Food and

## Environmental Sciences

### 247 Agriculture Science Hall (715) 425-3704 www.uwrf.edu/animal-science/

Steven Kelm-Chair, Larry Baumann, Dennis Cooper, Thomas Goerke, Kristina Hiney, Anthony Jilek, Sylvia Kehoe, Ranee May, Nathan O'Connor, Gary Onan, Peter Rayne, Purnendu C. Vasavada, Bonnie Walters, Steve Watters

The Department of Animal and Food Science 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 with the following exceptions:

CS (Communication/Speaking and Listening) designator: SCTA 101 or SCTA 116 is required

SL (Scientific Investigation) / S (Sciences) designator: BIOL 150 is required CHEM 120 or CHEM 121 is required

#### Foundation Courses in Agriculture: 12 cr. hrs.

ANSC 111 Introduction to Animal Science 3 cr. AGEC 230 Agricultural Economics I 3 cr. Select 2 from the following: AGEN 150 Introduction to Agricultural Engineering 3 cr. CROP 161 Introduction to Plant Science or HORT 161 Introduction to Plant Science 3 cr. FDSC 110 The Science of Food 3 cr. SOIL 210 Introduction to Soil Science 3 cr.

## Dairy Science Major: 63-65 Total Credits

#### Required Courses: 35 cr. hrs.

DASC 120 Orientation to Dairy Science 1 cr. ANSC 231 Principles of Nutrition 3 cr. ANSC 232 Applied Feeds and Feeding 3 cr. ANSC 257 Genetics 3 cr. ANSC 260 Animal Physiology 4 cr. DASC 306 Dairy Production 3 cr. ANSC 345 Animal Health 2 cr. ANSC 346 Principles of Animal Breeding 3 cr. DASC 404 Lactation and Milk Quality 3 cr. DASC 406 Advanced Dairy Management 3 cr. ANSC 433 Advanced Nutrition or DASC 436 Dairy Cattle Nutrition 3 cr. ANSC 448 Physiology of Reproduction 3 cr. DASC 485 Seminar: Dairy Science 1 cr.

#### Select Management, Science, or Minor Option

## Management Option 25 cr. hrs.

CHEM 230 General Organic Chemistry 3 cr. AGBI 251 Agricultural Biochemistry 3 cr. DASC 270 Internship I or DASC 370 Internship II 4 cr. **Choose two from:** AGEC 305 Agricultural Business Accounting 3 cr. AGEC 345 Agricultural Law 3 cr. AGEC 355 Agricultural Markets and Prices 3 cr.

AGEC 360 Farm Management 3 cr.

AGEC 365 Agricultural Finance 3 cr.

#### 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, Modern Language, 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 122 General Chemistry II 5 cr. CHEM 231 Organic Chemistry I 3 cr. CHEM 236 Organic Chemistry Lab I 1 cr. or CHEM 246 Synthetic and Analytical Techniques in Organic Chemistry I 2 cr. CHEM 232 Organic Chemistry II 3 cr. CHEM 237 Organic Chemistry Lab II 1 cr. or CHEM 247 Synthetic and Analytical Techniques in Organic Chemistry II 1 cr. CHEM 361 Biochemistry I 3 cr. MATH 147 College Algebra and Trigonometry 3 cr. or MATH 149 Precalculus 4 cr. or MATH 166 Calculus I 4 cr. PHYS 151 General Physics or PHYS 161 General Physics 4 cr. ANSC 341 Biometrics 3 cr. BIOL 324 Microbiology 4 cr.

#### Choose one from the following:

ANSC 447 Endocrinology 2 cr. BIOL 230 General Zoology 3 cr. BIOL 240 Cell and Molecular Biology 3 cr. CHEM 362 Biochemistry II 3 cr. CHEM 461 Pharmacology 3 cr. PHYS 152 General Physics II or PHYS 162 General Physics II 4 cr.

### Minor Option 28-30 cr. hrs.

Any minor of 22-24 credits or second major (other than Animal Science, Dairy Science, or Ag Studies). In addition to the minor or second major the following two courses are required: CHEM 230 General Organic Chemistry 3 cr. AGBI 251 Agricultural Biochemistry 3 cr.

#### Dairy Science Minor: 22 total cr. hrs.

#### Required courses: 18 cr. hrs.

ANSC 231 Principles of Nutrition 3 cr. ANSC 232 Applied Feeds and Feeding 3 cr. ANSC 257 Genetics 3 cr. DASC 306 Dairy Production 3 cr. **Choose two from:** 

DASC 404 Lactation and Milk Quality 3 cr. DASC 406 Advanced Dairy Management 3 cr. DASC 436 Dairy Cattle Nutrition 3 cr.

#### 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.

Dairy Science Two-Year Certificate: 60 total cr. hr.

General education requirements: 25-26 cr. hrs. BIOL 150 General Biology 3 cr. CHEM 120 Introduction to General Chemistry 6 cr. or CHEM 121 General Chemistry I 5 cr. ENGL 100 Academic Reading and Writing 3 cr. ENGL 200 Investigating Ideas: Reading, Writing, and the Disciplines 3 cr. ESM 105 Introduction to Environmental Studies 3 cr. MATH 146 College Algebra 3 cr. P ED 108 Health and Fitness for Life 1 cr. P E (Select two 0.5 cr. activities courses) 1 cr. SCTA 101 Fundamentals of Oral Communication 3 cr. Dairy Science requirements: 30 cr. hrs. ANSC 111 Introduction to Animal Science 3 cr. ANSC 231 Principles of Nutrition 3 cr. ANSC 232 Applied Feeds and Feeding 3 cr. ANSC 257 Genetics 3 cr. ANSC 345 Animal Health 2 cr. DASC 120 Orientation to Dairy Science 1 cr. DASC 306 Dairy Production 3 cr. CAFES Electives: 12 cr. hrs. General Electives: 4-5 cr. hrs.

Updated May, 2007

## Dance Education (DANC)

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

111 Karges Center (715) 425-3705 www.uwrf.edu/hhp/

Chair–Faye Perkins, Debra Allyn, Jenn Berna, Richard Bowen, Martha Brennan, Kevin Bullis, Dean Culpepper, Gary Eloranta, Patti Ford, Steve Freeman, Bill Henderson, Cindy Hovet, Crystal Lanning, John O'Grady, Robert Ritzer, Jim Tangen-Foster, Sue Tarr, Karla Zhe

The mission of the Department of Health and Human Performance is to prepare quality teachers, coaches, fitness and recreation leaders who will enrich and support the wellbeing of others; help all individuals live healthy, satisfying, and energetic lives; and cultivate a commitment to physical activity and healthy lifestyle choices.

### Dance Education Minor

#### Dance Minor Requirements 22-24 Total Credits Required Courses 22-24 cr. hrs. DANC 100 History/Appreciation of Dance 3 cr. DANC 107 Social Dance .5 cr. DANC 110 Basic Jazz Dance .5 cr. DANC 120 Fund. of Movement Through Dance 1 cr. DANC 150 Dance Improvisation 1 cr. DANC 221 Modern Dance II 1cr. DANC 224 Ballet I 1 cr. DANC 226 Ballet II 1 cr. DANC 250 Dance Composition 2 cr. DANC 257 Rhythms 2 cr. DANC 260 Dance Repertory 1-3 cr. DANC 362 Dance for the Elementary School 2 cr. HEAL 262 Human Anatomy and Physiology 3 cr. SCTA 333 Stage Lighting 3 cr.

Updated 06/07/2006

## Early Childhood Certification

Department of Teacher Education (TED)

## College of Education and Professional Studies

257 Wyman Education Building Phone Number (715) 425-3230 www.uwrf.edu/college-of-education/

Teri Crotty-Chair, Program Coordinator-Gayle Ward, Tim Holleran, Angela Kaiser, Teresa Kruizenga, Michael Miller, Florence Monsour, David Pepi, Margaret Phinney, Geoffrey Scheurman, José E. Vega

UW-River Falls offers a program in Early Childhood through Middle Childhood for students who are elementary majors with an early childhood minor, which meets certification requirements to teach Early Childhood through Middle Childhood - Regular Education. 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 preschool, 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 5 cr. Completion of 30 credits

#### Required Courses: 23 cr. hrs.

TED 225 Developmental Learning Experiences of Young Children 3 cr.

## **TED 225** is a prerequisite for all other Early Childhood courses:

- TED 330 Infant Toddler Programs 3 cr.
- TED 335 Kindergarten Curriculum and Materials 3 cr.
- TED 340 Pre-Kindergarten Curriculum 3 cr.
- TED 345 Parent Education and Family Development 3 cr.
- TED 400 Supervision and Management Early Childhood Program 2 cr.
- TED 405 Special Needs Child: Early Childhood Classroom 3 cr.
- TED 410 Early Childhood Language Arts 3 cr.

#### Student Teaching Requirement: 10 cr.

TED 471 Student Teaching: Pre-kindergarten/Kindergarten (Co-/Prerequisite TED 400)

Updated May, 2007

## **Earth Science Minor**

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

324 Agriculture Science Hall (715) 425-3345 www.uwrf.edu/pes/

Terry L. Ferriss-Chair, William A. Anderson, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove, Michael Crotser, Michael C. Kaltenberg, Kerry L. Keen, Michael D. Middleton, Eric M. Sanden, Brian R. Smith, Donavon H. Taylor, Laine Vignona, Susan J. Wiegrefe, Ian Williams

#### Earth Science Minor - 21 Total Credits Required Courses 16 cr. hrs.

GEOL 102 Introductory Geology Lab 1
GEOL 150 Historical Geology 4
GEOL 202 Oceanography 3
GEOL 269 Environmental Geology (writing intensive) 3
GEOL 330 Meteorology 2
PHYS 117 Introductory Astronomy 3
Electives 5 cr. hrs.
Select from 200 level or above Geology courses

Updated April, 2007

## **Economics (ECON)**

Department of Economics College of Business and Economics

## 124 South Hall (715) 425-3335 www.uwrf.edu/cbe/

John Walker –Chair, Jackie Brux, Hossein Eftekari, Pascal Ngoboka, Glenn Potts, Susan K. Rogers, Brian Schultz, Hamid Tabesh, John Walker, Ellen Schultz-Academic Adviser.

### General Education Requirements

### Admission Requirements

**For all majors in the College of Business and Economics:** Completion of at least 27 required general education credits with a minimum GPA of 2.25.

Additionally, the following must be completed, or in progress for completion, during the semester preceding admission. Students may register prior to acceptance, but acceptance is required for attendance in CBE upper-level courses. Students with GPAs between 2.0 and 2.25 may petition to the respective department chair for consideration on a case-by-case basis.

#### For admission to the Economics major:

GPA of 2.25 in ECON 201 and 202; ECON 205; ENGL 100 and 200

### Economics Major-Liberal Arts

## Major Requirements 35 Total Credits Option A: College of Arts and Sciences

Required Courses: 20 cr. hrs.

ECON 201 Principles of Microeconomics 3 cr.

ECON 202 Principles of Macroeconomics 3 cr.

ECON 205 Quantitative Analysis 3 cr.

ECON 301 Intermediate Microeconomics 3 cr.

ECON 302 Intermediate Macroeconomics 3 cr.

ECON 326 Statistical Methods for Economics and Business 3 cr. ECON 480 Senior Seminar (writing intenstive) 2 cr.

Elective Courses: 15 cr. hrs.

Economics courses 300 level or above

**Required Supporting Course: 3 cr. hrs.** ECON 226 Introduction to Statistics 3 cr. 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: 8 cr. hrs. ECON 226 Introduction to Statistics 3 cr. CSIS 215 Information Systems for Business Management 3 cr. CBE 100 Orientation to CBE 1cr. CBE 200 Professonal Development I 1 cr.

### **Economics Minor**

## Minor Requirements 24 Total Credits

#### Liberal Arts Option Required Courses: 15 cr. hrs.

ECON 201 Principles of Microeconomics 3 cr. ECON 202 Principles of Macroeconomics 3 cr. ECON 205 Quantitative Analysis 3 cr. ECON 301 Intermediate Microeconomics 3 cr. ECON 302 Intermediate Macroeconomics 3 cr. Electives: Economics-300 level or above 9 cr. hrs.

#### **Education Option Required Courses: 6 cr. hrs.**

ECON 201 Principles of Microeconomics 3 cr. ECON 202 Principles of Macroeconomics 3 cr. Electives in Economics: 18 cr. hrs. Choose from:

ECON 289 Special Topics: Economics 1-3 cr.
ECON 305 Money and Banking 3 cr.
ECON 312 Political Economy of Discrimination 3 cr.
ECON 316 Managerial Economics 3 cr.
ECON 324 Labor Economics 3 cr.
ECON 328 Domestic Topics in Third World Economic Development 3 cr.
ECON 329 International Topics in Third World Economic Development 3 cr.
ECON 332 Public Finance 3 cr.
ECON 334 Public Regulation 3 cr.
ECON 340 Contemporary International Trade Issues 3 cr.
ECON 342 International Finance 3 cr.
ECON 344 Comparative Economic Systems 3 cr.
ECON 362 History of Economic Thought 3 cr.

ECON 489 Special Topics: Economics 1-3 cr.

Updated March, 2007

# **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-ofeducation/

Teri Crotty-Chair, Tim Holleran, Angela Kaiser, Teresa Kruizenga, Michael Miller, Florence Monsour, David Pepi, Margaret Phinney, Geoffrey Scheurman, José E. Vega, Gay Ward

The four-year curriculum is designed to prepare a student for a bachelor's degree in Elementary Education. The program 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 licensable in Wisconsin to teach Middle Childhood - Early Adolescence, Regular Education. The addition of the Early Childhood minor meets requirements for an Early Childhood through Middle Childhood, Regular Education license in the state of Wisconsin.

Admission to Teacher Education is required the semester prior to enrolling in the Block courses. 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.

The techniques blocks give students the opportunity to spend three days per week, for two semesters in public schools with this innovative instructional program. The Blocks consist of the following courses:

Block I: TED 312 (science), 315 (math), 317 (reading) 12 cr. hrs.

Block II: TED 310 (language arts), 311 (social studies), 316 (reading) 12 cr. hrs.

## General Education Requirements as listed.

#### **Elementary Education Major: 46 Total Credits**

- TED 155 Intro to Tech Integration and the Reflective Multimedia 2 cr.
- TED 211 Educational Psychology: Elementary Ed (writing intensive) 5 cr.
- TED 420 School and Society (writing intensive) 3 cr.
- TED 310 Techniques in Elementary Education: Language Arts 4 cr.

TED 311 Techniques in Elementary Education: Social Studies 4 cr. TED 312 Techniques in Elementary Education: Science 4 cr. TED 315 Techniques in Elementary Education: Mathematics 4 cr. TED 316 Developmental Reading 4 cr. TED 317 Reading Practicum 4 cr. TED 472 Student Teaching: Elementary Education 12 cr. Required Courses: 25 cr. hrs. TED 252 Foundations of Multicultural Education 3 cr. TED 255 Reading Guidance for Children or ENGL 250 Literature for Children 3 cr. ART 250 Child Art 2 cr. ESM 300 Environmental Education 3 cr. HEAL 361 Methods and Materials in Health for the Elementary Teacher 3 cr. MATH 247 Mathematics for Elementary Teachers II 4 cr. MUS 350 Music for Elementary Teachers 2 cr. P ED 326 Techniques in Physical Education for the Elementary School Teacher 2 cr.

PSYC 330 The Exceptional Child 3 cr.

## 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 General Science Mathematics Modern Language Social Studies Speech Communication Teaching English as a Second Language

Other acceptable minors are: Anthropology Biology Chemistry Coaching/Athletics Communicative Disorders Dance Earth Science Economics English Geography History Journalism Philosophy Physics Political Science Psychology Sociology

Updated May, 2007

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

## 245 Kleinpell Fine Arts Building (715) 425-3537 www.uwrf.edu/english/

Laura Zlogar–Chair, Jennifer Brantley, David Furniss, Greta Gaard, Larry Harred, Mialisa Hubbard Kathleen Hunzer, Nicholas Karolides, Annette Klemp, Steven Luebke, Richard McNamara, James Mulvey, Ronald Neuhaus, Michelle Parkinson, Vladimir Pavlov, Elizabeth Schneider-Rebozo, Robyne Tiedeman, Marshall Toman, Ruth Wood

The Bachelor of Arts degree is offered in English, Literature Emphasis; English, Creating Writing Emphasis; 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, Literature Emphasis-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 English, Creative Writing Emphasis-Liberal Arts gives students preparation in both creative writing and literature. This degree helps students interested in pursuing a graduate degree or a career in the publishing and writing fields.

The B.A. 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. See page 117-118 in the printed catalog 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, Literature Emphasis-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 English, Creative Writing Emphasis-Liberal Arts gives students preparation in both creative writing and literature. This degree helps students interested in pursuing a graduate degree or a career in the publishing and writing fields.

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

B.A. and B.S. Liberal Arts Majors as listed with the following exceptions: Humanities and Fine Arts: ENGL 243.

Education as listed with the following exceptions: Humanities and Fine Arts: 9 cr. hrs. ENGL 243 Types of Literature 3 cr. hr. SCTA 105 Introduction to Theatre and Drama. 3 cr. hr. 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.

## Literature Emphasis - Liberal Arts: 36 Total Credits Required Courses: 27 cr. hrs.

ENGL 251 Advanced Composition 3 cr. ENGL 253 Introduction to Literary Studies 3 cr. ENGL 321 English Language: History and Culture 3 cr. ENGL 324 Survey of American Lit. I, Origins to 1900 (writing intensive) 3 cr. ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive) 3 cr. ENGL 331 Survey of British Lit. I, to 1800 (writing intensive) 3 cr. ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive) 3 cr. ENGL 335 Shakespeare 3 cr. ENGL 444 Major Authors 3 cr. 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. Select one genre, sub-genre, or diversity literature course: 3 cr. hrs. ENGL 202 Literature of Science Fiction 3 cr. ENGL 203 Literature of the African-American Experience 3 cr. ENGL 206 Ethnic Film and Literature 3 cr. ENGL 207 Literature of the Asian-American Experience 3 cr. ENGL 212 The Native American in Literature 3 cr. ENGL 214 Women in Literature 3 cr. ENGL 222 Literature of Fantasy 3 cr. ENGL 226 Detective Fiction 3 cr. ENGL 231 The Short Story 3 cr. ENGL 232 Contemporary Drama 3 cr. ENGL 233 Introduction to Poetry 3 cr. ENGL 234 Modern Novels 3 cr. ENGL 235 American Autobiography 3 cr. ENGL 300 Women and Film 3 cr. ENGL 343 The Novel and Film Adaptations 3 cr. ENGL 443 American Ethnic Women Writers 3 cr. Select one period course, English, American or International 3 cr. hrs.

ENGL 341 European Literature (19th Century) 3 cr.

ENGL 426 Victorian Literature 3 cr.

ENGL 427 Modern British Literature: 1890-1940 3 cr.

ENGL 428 Modern British Literature: 1940-Present 3 cr.

ENGL 429 American Renaissance 3 cr.

ENGL 430 American Realism 3 cr.

ENGL 431 Modern American Fiction 3 cr.

ENGL 432 Contemporary American Literature 3 cr.

ENGL 441 Twentieth-Century International Literature 3 cr. Select one English course at the 300-/400 level 3 cr. hrs.

Free Elective: 3 cr. hrs.

## Creative Writing Emphasis-Liberal Arts: 36

Total Credits

Required Courses: 18 cr. hrs. Writing Component 9 cr. hrs. ENGL 262 Creative Writing 3 cr. ENGL 382\* Writing Workshop in Prose and Poetry 3 cr. ENGL 482 Writing Seminar in Fiction and Poetry 1-3 cr. \*ENGL 382 may be taken again, under 1B below. Directed Electives in Writing 9 cr. hrs. (At least 6 of the credits must be from ENGL 368, 369, or 370) ENGL 368 Writing Poetry 3 cr. ENGL 369 Writing Fiction 3 cr. ENGL 370 Writing Nonfiction 3 cr. ENGL 382 Writing Workshop in Prose and Poetry 3 cr. Coursework Outside Creative Writing: 18 cr. hrs. Required Courses: 12 cr. hrs. ENGL 251 Advanced Composition 3 cr. ENGL 253 Introduction to Literary Studies 3 cr. ENGL 321 English Language: History and Culture 3 cr. ENGL 331 Survey of English Literature I: to 1800 3 cr. Directed Electives in Literature 6 cr. hrs. Choose one course from Modern/Contemporary Period 3 cr. hrs. ENGL 325 Survey of American Literature II 3 cr. ENGL 332 Survey of English Literature II 3 cr. ENGL 432 Contemporary American Literature 3 cr. ENGL 344 Major Authors 3 cr. Genre Courses (preferably in area of specialization) 3 cr. hrs. ENGL 202 Literature of Science Fiction 3 cr. ENGL 222 Literature of Fantasy 3 cr. ENGL 226 Detective Fiction 3 cr. ENGL 231 The Short Story 3 cr. ENGL 232 Contemporary Drama 3 cr. ENGL 233 Introduction to Poetry 3 cr. ENGL 234 Modern Novels 3 cr. ENGL 235 American Autobiography 3 cr. ENGL 250 Children≠s Literature 3 cr. ENGL 342 Developments in the Novel 3 cr. ENGL 355 Literature for Adolescents 3 cr. English Minor Liberal Arts: 24 cr. hrs. This minor has a Literature Emphasis. Required courses: 18 cr. hrs. ENGL 251 Advanced Composition 3 cr. ENGL 253 Introduction to Literary Studies 3 cr. ENGL 321 The English Language: History and Culture 3 cr. ENGL 335 Shakespeare 3 cr. Select one American survey course\* ENGL 324 Survey of American Literature I, Origins-1900 3 cr. OR ENGL 325 Survey of American Literature II, 1900-1980 3 cr. Select one British survey course\*

ENGL 331 Survey of English Literature I, 650-1800 3 cr. OR

ENGL 332 Survey of English Literature II, 1800-Present 3 cr.

\*One survey course must cover the period before 1800.

#### **Directed Electives: 6 cr. hrs.**

Select one genre course: 3 cr. hrs.

ENGL 231 The Short Story 3 cr.

ENGL 232 Contemporary Drama 3 cr.

- ENGL 233 Introduction to Poetry 3 cr. ENGL 234 Modern Novels 3 cr.
- ENGL 342 Developments in the Novel

ENGL 342 Developments in the Novel ENGL 343 The Novel and Film Adaptations 3 cr.

ENGL 344 Major Authors 3 cr.

#### Select one period course, English, American or

#### International: 3 cr. hrs.

ENGL 341 European Literature (19th Century) 3 cr.

- ENGL 426 Victorian Literature 3 cr.
- ENGL 427 Modern British Literature: 1890-1940 3 cr.
- ENGL 428 Modern British Literature: 1940-Present 3 cr.
- ENGL 429 American Renaissance 3 cr.
- ENGL 430 American Realism 3 cr.

ENGL 431 Modern American Fiction 3 cr.

ENGL 432 Contemporary American Literature 3 cr.

ENGL 441 Twentieth-Century International Literature 3 cr.

## English Major- Education

### Professional Courses: 36 cr. hrs.

TED 120 Introduction to Education and Instructional Technology 3 cr.

TED 212 Educational Psychology (writing intensive) 5 cr. TED 420 School and Society (admission to teacher education required) 3 cr.

TED 422 Content Area Literacy in Middle and Secondary School 3 cr.

TED 432 Techniques of Middle/Secondary Education: English 3 cr.

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 39. PSYC 330 Exceptional Child 3 cr.

TED 414 Transescent Development, Middle School Methods 4 cr.

TED 473 Student Teaching: Middle Level. 6 cr.

Required for Middle School certification.

TED 474 Student Teaching: Secondary 6 cr.

## Major Requirements: English-Education 39 cr. hrs.

#### Required Courses: 36 cr. hrs.

ENGL 251 Advanced Composition 3 cr.

ENGL 253 Introduction to Literary Studies 3 cr.

ENGL 320 Structure of English 3 cr.

ENGL 321 English Language: History and Culture 3 cr. \*ENGL 324 Survey of American Lit. I, Origins to 1900

(writing intensive) 3 cr. \*ENGL 225 Survey of American Lit. II. 1000-1080 (w

\*ENGL 325 Survey of American Lit. II, 1900-1980 (writing intensive) 3 cr.

\*ENGL 331 Survey of British Lit. I, to 1800 (writing intensive) 3 cr.

\*ENGL 332 Survey of British Lit. II, 1800-Present (writing intensive) 3 cr.

ENGL 335 Shakespeare 3 cr.

ENGL 355 Literature for Adolescents 3 cr.

ENGL 361 Composition Theory 3 cr.

ENGL 441 Twentieth-Century International Literature 3 cr.

\*One of these survey courses may be replaced by a

second period course of the same national (British or

American)literature included in the list below.

#### Directed Electives: 3 cr. hrs.

Select one period course English or American

ENGL 341 European Literature (19th Century) 3 cr.

ENGL 426 Victorian Literature 3 cr.

ENGL 427 Modern British Literature: 1890-1940 3 cr.

ENGL 428 Modern British Literature: 1940-Present 3 cr.

ENGL 429 American Renaissance 3 cr.

ENGL 430 American Realism 3 cr.

ENGL 431 Modern American Fiction 3 cr.

ENGL 432 Contemporary American Literature 3 cr.

#### English Education Minor: 27 Total Credits Required Courses: 18 cr. hrs.

ENGL 251 Advanced Composition 3 cr.

ENGL 253 Introduction to Literary Studies 3 cr.

ENGL 320 Structure of English 3 cr.

ENGL 321 English Language: History and Culture 3 cr.

ENGL 335 Shakespeare 3 cr.

ENGL 361 Composition Theory 3 cr.

#### Survey/Period Courses: 6 cr. hrs.

One survey course must cover the period before 1800, whether it be British or American.

A. Select one survey course:

ENGL 324 Survey of American Lit. I, Origins to 1900 3cr. OR

ENGL 325 Survey of American Lit. II, 1900-1980 3 cr.

**B.** Select one survey or period course:

ENGL 331 Survey of British Lit. I, to 1800 3 cr. OR

ENGL 332 Survey of British Lit. II, 1800-Present 3 cr.

ENGL 426 Victorian Literature 3 cr.

ENGL 427 Modern British Literature: 1890-1940 3 cr.

ENGL 428 Modern British Literature: 1940-Present 3 cr.

Required Supporting Course: 3 cr. hrs.

ENGL 355 Literature for Adolescents 3 cr.

## Broad Area English Education Major: 63 Total Credits

#### I. Required Courses: 36 cr. hrs.

ENGL 251 Advanced Composition 3 cr.

ENGL 253 Introduction to Literary Studies 3 cr.

ENGL 320 Structure of English 3 cr.

\*ENGL 324 Survey of American Lit. I, Origins to 1900 3 cr.

\*ENGL 325 Survey of American Lit. II, 1900-1980 3 cr.

\*ENGL 331 Survey of British Lit I, to 1800 3 cr.

\*ENGL 332 Survey of British Lit. II, 1800-Present 3 cr. ENGL 335 Shakespeare 3 cr. ENGL 355 Literature for Adolescents 3 cr.

ENGL 361 Composition Theory 3 cr.

ENGL 441 Twentieth-Century International Literature 3 cr. \*At least 3 period courses must be taken. A second American period course that covers the same time period as the survey may replace one of the American survey courses, or a second English period course that covers the same time period may replace one of the English survey courses.

## II. Directed Electives in Period Courses-select one for 3 cr. hrs.

## Students who take ENGL 324 must choose one of the following period courses:

ENGL 426 Victorian Literature 3 cr. ENGL 427 Modern British Literature: 1890-1940 3 cr. ENGL 428 Modern British Literature: 1940-Present 3 cr. **Students who take ENGL 331 must choose one of the following period courses:** ENGL 429 American Renaissance 3 cr.

ENGL 430 American Realism 3 cr.

ENGL 431 Modern American Fiction 3 cr.

ENGL 432 Contemporary American Literature 3 cr.

Students who take both ENGL 324 and 331 may take any period course to satisfy this requirement.

#### III. Journalism: select one course for 3 cr. hrs.

JOUR 110 Principles of Journalism 3 cr. JOUR 121 Radio News Production 3 cr. JOUR 269 Feature Writing for Magazines and Newspapers 3 cr. JOUR 360 Opinion Writing 3 cr.

#### IV. Speech or Theater Arts: select one course for 3 cr. hrs.

SCTA 121 Acting I: Basic Techniques 3 cr.
SCTA 208 Problem Solving in Small Group Communication 3 cr.
SCTA 211 Public Speaking 3 cr.
SCTA 221 Acting II: Characterization 3 cr.
SCTA 223 Oral Interpretation of Literature 3 cr.
SCTA 311 Persuasion 3 cr.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr.
SCTA 334 Playwriting 3 cr.
SCTA 335 Directing I 3 cr.

#### V. Film Studies: select one courses for 3 cr.

SCTA/FILM 200 Introduction to Film Studies 3 cr. SCTA/FILM 248 Cultures in Conflict 3 cr. ENGL/FLIM 206 Ethnic Film and Literature 3 cr. ENGL/WMST/FILM 300 Women and Film 3 cr. ENGL/SCTA/FILM 301 History of Film 3 cr. ENGL/FILM 343 The Novel and Film Adaptations 3 cr. ENGL/FILM 442 World Cinema 3 cr. HIST 389 Topics in History (Film) 3 cr.

## VI. Directed electives in pedagogy: select one course for 3 cr.

ENGL 350 Children\\\'s Literature: Issues and Trends 3 cr. ENGL 360 Theory & Methodology of TESOL 3 cr. ENGL 372 Practicum: Peer Tutoring & Writing Instruction 3 cr.

ENGL 455 Adolescent Literature: Issues and Trends SCTA 233 Oral Interpretation of Literature SCTA 235 Directing I SCTA 407 Listening Instruction TED 461 The Psychology and Pedagogy of Literacy

#### VII. Cultural Perspectives: choose either World Culture or American Culture, and select two courses within that grouping for 6 cr. hrs.

A. World Culture (select two courses) ART 211 Western Art to 1500 3 cr. ART 212 Art History from 1500 3 cr. ART 314 Art of China, India and Japan 2 cr. ART 318 Latin American Art 2 cr. ENGL 444 Major Authors 3 cr. (British writer) HIST 321 The Middle Ages 3 cr. HIST 322 The Renaissance 3 cr. HIST 323 The Reformation 3 cr. HIST 324 Absolutism, Enlightenment, and Revolution 3 cr. HIST 327 World War I to World War II 3 cr. HIST 328 World War II and the Cold War 3 cr. HIST 330 Revolutions in Modern History 3 cr. MUS 300 World Music 3 cr. (This course also meets the University Global Perspectives General Education requirement.) PHIL 221 Ancient Philosophy 3 cr. PHIL 222 Hellenistic and Medieval Philosophy 3 cr. PHIL 224 Existentialism and Late Modern Philosophy 3 cr. PHIL 230 Logical Reasoning 3 cr. PHIL 235 Philosophy of the Arts 3 cr. HUM 300 Senior Level Interdisciplinary Capstone Course in Humanities 2 cr. HUM 311 Arts and Ideas I 4 cr. HUM 312 Arts and Ideas II OR **B.** American Culture (select two courses): ART 311 American Art to 1865 3 cr. ART 312 American Art since 1865 3 cr. ENGL 444 Major Authors 3 cr. (American writer) HIST 103 U. S. History to 1877 3 cr. HIST 104 U.S. History Since 1865 3 cr. HIST 205 Women's History: United States 3 cr. HIST 206 Native Americans and the United States 3 cr. (This course also meets the University Diversity General Education requirement.) HIST 207 African American History 3 cr. (This course also meets the University Diversity General Education requirement.) HIST 369 American Intellectual History 3 cr. MUS 200 American Music 3 cr. SOCI 228 Native American Cultures 3 cr. SCTA 230 Playwrights of Color 3 cr. SCTA 339 American Theatre 3 cr.

## VIII. Mass Media or Advanced Journalism: select one coure for 3 cr. hrs.

(Majors are encouraged to take JOUR 455 or PHIL 316, any of these will count.)

JOUR 101 Introduction to Mass Communications 3 cr.

JOUR 320 Journalism and Public Opinion 3 cr. JOUR 345 History of Mass Communication 3 cr. JOUR 455 Mass Media and Society 3 cr. SCTA 353 Mass Media and Popular Culture 3 cr. PHIL 316 Media Ethics 3 cr.

## IX. Advanced Speech or Theater: select one course for 3 cr. hrs.

SCTA 306 Nonverbal Communication 3 cr. SCTA 314 Introduction to Criticism for Oral Communication 3 cr. SCTA 316 Organizational Communication 3 cr. SCTA 319 Freedom to Speak 3 cr. SCTA 407 Listening Instruction 3 cr. SCTA 414 Speech in History 3 cr.

## X. Directed Elective: select one course from one of these groupings for 3 cr. hrs.

**Dramatic Literature, choose from the following: 3 cr. hrs.** ENGL 232 Contemporary Drama 3 cr.

#### A. Dramatic Literature

ENGL 232 Contemporary Drama ENGL 422 Renaissance Drama ENGL 424 Drama and Novels of the Restoration and 18th Century SCTA 337 History of Theatre and Dramatic Literature: Ancient Traditions through Renaissance Drama 3 cr. SCTA 338 History of Theatre and Dramatic Literature: 18th Century to the Present 3 cr.

SCTA 339 American Theatre 3 cr. OR

#### **B.** Humanities

HUM 311 Arts and Ideas I 4 cr. HUM 312 Arts and Ideas II 4 cr. OR

#### C. One course from FILM STUDIES or JOURNALISM

Note: English Education majors must take TED 432, Techniques of English Education, in addition to the above courses for English licensure.

Updated 02/13/2007

## **Environmental Science**

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

## 324 Agriculture Science Hall (715) 425-3345 www.uwrf.edu/pes/

Terry L. Ferriss-Chair, William A. Anderson, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove, Michael Crotser, Michael C. Kaltenberg, Kerry L. Keen, Michael D. Middleton, Eric M. Sanden, Brian R. Smith, Donavon H. Taylor, Laine Vignona, Ian Williams

The environmental science major is designed to prepare students to face challenges in 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, local, state and federal environmental agencies or corporations. Students with environmental 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 in the College of Arts and Sciences.

## General Education Requirements

College of Agriculture, Food and Environmental Science: As listed with the following exceptions: Ethical Citizenship: ESM 105 required. Sciences: GEOL 101 and BIOL 150 required.

College of Arts and Sciences: As listed on pp. 4-10.

## Foundation Courses in Agriculture 9 cr. hrs.

SOIL 210 Introductory Soil Science 3 cr. ESM 151 Introduction to Land Use Theory and Practice 3 cr.

#### Select 1 from:

AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. or AGEC 230 Agricultural Economics I 3 cr. CROP 161 Introduction to Plant Science 3 cr. or HORT 161 Introduction to Plant Science

## OR College of Arts and Sciences

#### Requirements: 9 cr. hrs.

SOCI 245 Environmental Sociology 3 cr. PHIL 303 Environmental Ethics 3 cr. ESM 307 Multicultural Perspectives on the Environment 3 cr.

### Environmental Science Major

#### Environmental Science Core 28 cr. hrs.

ENGL 367 Technical Writing 3 cr. ES 100 Environmental Science Freshman Seminar 1 cr. ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. ESM 305 Environmental Impact Assessment 2 cr. ESM 360 Applied Hydrology and Water Quality 4 cr. ESM 412 Chemical Fate and Transport in the Environment 3 cr. ESM 413 Environmental Analysis 4 cr. ESM 485 Seminar in Resource Management 1 cr. GEOL102 Introductory Geology Lab 1 cr. Choose one of the following: ESM 303 Environmental Policies and Administration 3 cr. BIOL 355 Environmental Law 3 cr. POLS 355 Environmental Law 3 cr. Choose one of the following: MATH 226 Fundamentals of Statistics 3 cr. MATH 326 Applied Statistics 3 cr. ANSC 341 Biometrics 3 cr. GEOG 365 Quantitative Techniques for Geographers 3 cr. Required Supporting Courses: 34-36 cr. hrs. MATH 166 Calculus 4 cr. CHEM 120 Introduction to General Chemistry 6 cr. or CHEM 121 General Chemistry I 5 cr. CHEM 122 General Chemistry II 5 cr. Choose one of the following two chemistry lecture/lab series: A. CHEM 231 Organic Chemistry I 3 cr. CHEM 236 Organic Chemistry Lab I 1 cr. B. CHEM 251 Analytical Chemistry 2 cr. CHEM 256 Analytical Chemistry Lab 1 cr. Choose one of the following two physics series A. or B.: A. PHYS 151 General Physics I 4 cr. PHYS 156 General Physics Lab I 1 cr. B. PHYS 161 General Physics I 4 cr. PHYS 101 General Physics Lab I 1 cr. Choose one of the following two courses: BIOL 210 General Botany 3 cr. BIOL 230 General Zoology 3 cr. Choose one of the following two courses: BIOL 240 Cell and Molecular Biology 3 cr. BIOL 324 Microbiology 3 cr.

#### 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. BIOL 210, 230, 240, 310, 324, 330, 344, 354, 360, 412, 413, 434, 444 3-4 cr. GEOG 212, 250, 255, 316, 360, 368, 379, 412, 450, 460 3-12 cr. PHYS 152, 157, 162, 102, CHEM 231 and 236, 232 and 237, 251 and 256, 356 1-3 cr. AGEN 325, 365, 425, GENG 450 3-4 cr. GEOL 269, 327, 330, 417, 445 2-4 cr. ESM 270, 333, 363, 370, 377 2-4 cr. AGEC 450 3 cr.

### Environmental Studies Minor

#### Environmental Studies Minor: 22 Total Credits **Required Courses: 10 cr. hrs.** (ESM 105 is a prerequisite) ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr. ESM 303 Environmental Policies and Administration 3 cr. GEOG 110 Physical Environment: Patterns and Systems (3) and GEOG 111 Laboratory for Physical Environments: Patterns and Systems (1) 4 cr. or GEOL 101 Introductory Geology (3) and GEOL 102 Introductory Geology Lab (1) 4 cr. Directed Electives: 12 cr. hrs. (6 credits at the 300 level or above) ESM 109, 151, 307, 377, 490 3 cr. ESM 300 or GEOG 300 3 cr. GEOL 202, 269, 490 1-3 cr. GEOL 330 or GEOG 300 2-3 cr. GEOG 490, 499 1-3 cr. BIOL/POLS 355 3 cr. ENGL 228 3 cr. PHIL 303 3 cr. CHEM 200 3 cr. SOCI 245 3 cr.

## **Ethnic Studies (ETHN)**

## Interdisciplinary Program

## 157 Centennial Science Hall (715) 425-4689 www.uwrf.edu/ethnic studies

Cyndi Kernahan-Coordinator

The ethnic studies minor is designed to allow students to study and focus their attention on the ethnic experiences in America. In addition, the minor provides courses that allow students to examine ethnicity in a broader international context. 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.

## Ethnic Studies Minor

#### Minor Requirements: 24 Total Credits Required Courses: 3 cr. hrs.

ETHN 200 Introduction to Ethnic Studies 3 cr. Directed Electives: Electives in American Ethnicity 6 cr. hrs. ECON 312 Political Economy of Discrimination 3 cr. ENGL 206 Ethnic Film and Literature 3 cr. ENGL 235 American Autobiography 3 cr. ENGL 443 American Ethnic Women Writers 3 cr. HIST 204 U.S. Immigration and Ethnic History 3 cr. MNGT 330 Managing Workplace Diversity 3 cr. PHIL 245 Islamic and Oriental Religions in the U.S. 3 cr. POLS 212 The Politics of Equality and Inequality in the United States 3 cr. PSYC 285 Psychology of Prejudice and Racism 3 cr. SCTA 230 Playwrites of Color 3 cr. SCTA 313 Intercultural Communication 3 cr. Directed Electives: 9 cr. hrs. Electives in Specific Ethnic Groups ANTH 228 Native American Cultures 3 cr. ENGL 203 Literature of the African American Experience 3 cr. ENGL 212 The Native American in Literature 3 cr. ETHN 270 Puerto Rican Society 3 cr. HIST 206 Native Americans and the United States 3 cr. HIST 207 African-American History 3 cr. HIST 208 History of Mexican-Americans 3 cr. MUS 255 History of Jazz 3 cr. Directed Electives: Supporting Courses 6 cr. hrs. **Courses Relating to an Ethnic Heritage** ART 314 Art of China, India, and Japan 3 cr.

ART 318 Latin American Art 2 cr. GEOG 342 Latin America 3 cr. GEOG 343 Africa 3 cr. GEOG 344 Asia and Oceania 3 cr. HIST 201 Introduction to Asian Civilization 3 cr. HIST 202 Introduction to Latin American Civilizations 3 cr. POLS 348 Politics of East Asia 3 cr. **Courses Relevant to the American Ethnic Experience** GEOG 237 Poverty in the United States 3 cr. WMST 200 Introduction to Women's Studies 3 cr. ESM 307 Multicultural Perspectives on the Environment 3 cr.

## Courses Relating to International Race and Ethnicity maximum of 3 cr. hrs.

MNTG 310 Culture and Business 3 cr. MODL 376 Mexico: A Cultural Experience 3 cr. HIST 436 History of Colonialism and Imperialism 3 cr. CBE 370 International Study Tour for Business and Economics 3 cr.

#### Double Minor: Ethnic Studies & Women's Studies.

## **Farm Management**

## Department of Agricultural Economics College of Agriculture, Food and Environmental Sciences

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

David Trechter–Chair, Brenda Boetel, Gregg Hadley, Lewis May, Stanley Schraufnagel, Nate Splett. Farm Management Minor

## Minor Requirements 24 Total Credits Required courses:

AGEC 230 Agricultural Economics I 3 cr. AGEC 240 Cooperatives 3 cr. AGEC 305 Agricultural Business Accounting 3 cr. AGEC 355 Agricultural Markets and Prices (writing intensive) 3 cr. AGEC 360 Farm Management 3 cr. AGEC 365 Agricultural Finance 3 cr. AGEC 456 Commodity Marketing 3 cr. AGEC 440 Agricultural Policy I (writing intensive) 3 cr.

## Film Studies (FILM) Interdisciplinary

## 260 Kleinpell Fine Arts (715) 425-3354 www.uwrf.edu/film-studies-minor/

Kathleen Hunzer-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

#### Film Studies Minor: 23-24 Total Credits Required Courses: 8-9 cr. hrs.

FILM 200 Introduction to Film Studies 3 cr. or SCTA 200 Introduction to Film Studies FILM 301 History of Film 3 cr. or ENGL 301 History of Film or HIST 301 History of Film or JOUR 301 History of Film or SCTA 301 History of Film FILM 499 Directed Project in Film 2-3 cr. Criticism Electives: 6-9 cr. hrs. FILM 206 Ethnic Film and Literature 3 cr. FILM 248 Cultures in Conflict 3 cr. FILM 300 Women and Film 3 cr. FILM 302 History of Documentary 3 cr. FILM 343 The Novel and Film Adaptations 3 cr. FILM 442 World Cinema 3 cr. Directed Electives: 6-9 cr. hrs. FILM 160 TV Studio Production 3 cr. FILM 232 Makeup for Theatre, Film, and Video 3 cr. FILM 245 Writing for Film and Television 3 cr. FILM 260 Electronic Field Production 3 cr. FILM 261 Electronic Media Copy Writing 3 cr. FILM 289 Special Topics: Film .5-3 cr. (Co-listed with ENGL and MODL, which offer individual courses) FILM 310 Sociology Through Film 3 cr. FILM 315 German Classic and Modern Film 3 cr. FILM 360 Corporate Electronic Communication 3 cr. FILM 389 Special Topics 2-3 cr. (Co-listed with HIST, JOUR, MUS, SCTA, SOCI, which offer individual courses) FILM 448 Teaching Film in the Secondary School 3 cr.

FILM 489 Special Topics 2-3 cr. (Co-listed with ENGL and HIST, which offer individual courses) FILM 495 Independent Study 1-3 cr.

Updated 08/24/2006

## 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 www.uwrf.edu/animal-science/

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

## General Education Requirements

As listed with the following exceptions: Sciences Required Courses: CHEM 121 or 110 with Dean's Approval, 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. ANSC 231 Principles of Nutrition 3 cr. AGEN 352 Food Engineering 3 cr. AGEC230 Agriculture Economics I 3 cr. Food Science and Technology Major

### Food Science and Technology Major: 43-47 Total Credits Required Courses: 29 cr. hrs.

FDSC 113 Intro Food Science Lab 1 cr.
Choose one of the following three courses:
FDSC 202 Dairy Manufacturing I-required for Dairy Tech Option
or FDSC 238 Meat and Meat Products 3 cr.
or FDSC 259 Cereal Technology
FDSC 285 Seminar in Food Science 1 cr.
FDSC 312 Food Processing 4 cr.
FDSC 313 Food Processing Lab 1 cr.
FDSC 320 Food Quality Assurance 2 cr.
FDSC 335 Food Microbiology 4 cr.
FDSC 360 Food Chemistry 3 cr.
FDSC 385 Seminar in Food Science 1 cr.
FDSC 385 Seminar in Food Science 1 cr.
FDSC 422 Product Development and Sensory Evaluation 4 cr.
FDSC 461 Food Analysis 4 cr.

FDSC 485 Seminar in Food Science 1 cr. **Required Supporting Courses: 19 cr. hrs.** CHEM 122 General Chemistry II 5 cr. CHEM 230 General Organic Chemistry 3 cr. or CHEM 231 Organic Chemistry I cr. AGBI 251 Agricultural Biochemistry 3 cr. or CHEM 361 Biochemistry AGBI 252 Agricultural Biochemistry Laboratory Techniques 1 cr. BIOL 324 Bacteriology 4 cr. ANSC 341 Biometrics 3 cr. FDSC 270 Internship 2-4 cr.

## Select Industry, Dairy Technology, or Science Option below:

### Industry Option 14-16 cr. hrs

ACCT231 Principles in Accounting I 3 cr. Select two from: FINC 345 Managerial Finance 3 cr. or AGEC 365 Agricultural Finance MNGT 300 Principles of Management 3 cr. or AGEC 468 Agribusiness Firm Management MKTG 310 Principles of Marketing 3 cr. or AGEC 355 Agricultural Markets and Prices Electives (choose any Food Science courses) 5-7 cr. hrs.

### Dairy Technology Option 14-18 cr. hrs.

FDSC 302 Dairy Manufacturing II 3 cr. FDSC 469 Dairy Plant Management 2 cr. FDSC 470 Dairy Plant Management Lab 1 cr. AGEC 355 Agricultural Markets and Prices 3 cr. AGEC 468 Agribusiness Firm Management 3 cr. 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. CHEM 236 Organic Chemistry Lab I 1 cr. CHEM 237 Organic Chemistry Lab II 1 cr. MATH 167 Calculus II 4 cr. Electives (choose any Food Science Courses) 5-7 cr. hrs.

## Food Science Minor

#### Food Science Minor: 22 Total Credits Required Courses: 17 cr. hrs. FDSC 112 Intro to Food Science 3 cr. FDSC 113 Intro Food Science Lab 1cr. Choose one of the following three courses: FDSC 202 Dairy Manufacturing I or FDSC 238 Meat and Meat Products or FDSC 259 Cereal Technology 3 cr. Choose one of the following: FDSC 240 Meat Product Processing 3 cr

FDSC 240 Meat Product Processing 3 cr FDSC 302 Dairy Manufacturing II 3 cr. FDSC 312 Food Processing 4 cr. FDSC 313 Food Processing Lab 1 cr. FDSC 335 Food Microbiology 4 cr. BIOL 324 Bacteriology 4 cr. **Select from: (Must be 300 level or above) 6-7 cr.** All remaining Food Science Courses CHEM 355 Separation Science Laboratory AGBI 251 and 252 Agricultural Biochemistry and Lab or CHEM 361 Biochemistry I AGEN 352 Food and Process Engineering

## **Geography (GEOG)**

## Department of Geography and Mapping Sciences College of Arts and Sciences

## 344 Kleinpell Fine Arts Building (715) 425-3264 www.uwrf.edu/geography/

Charles Rader-Chair, Mathew Dooley, John Heppen, Donald Petzold

Geography is an all encompassing discipline that seeks to understand the world and the interrelationships between humans and their environment. Geographers use data from many sources, techniques, and Geographic Information Systems (GIS) to analyze and map the constantly changing natural and human landscapes from local to global scales. Geographers approach the world from a multidisciplinary perspective that integrates knowledge from the social and natural sciences. Students can tailor their individual plan of study to focus on human geography, physical geography, or Geographic Information Science. The department offers a GIS/Cartography minor that covers GIS theory, applications, and map design. Courses are taught in a state-of-the-art GIS laboratory. Geography majors and minors are prepared to pursue advanced degrees, careers in government, consulting, planning, travel, industry, geographic analysis, and map design.

## General Education Requirements

BA and BS Liberal Arts majors as listed. BS Education majors as listed. Geography Major-Liberal Arts Geography Major - Liberal Arts: 37 Total Credits (without a GIS/Cartography Minor)

#### Required Courses: 19 cr. hrs.

GEOG 110 Physical Environment: Patterns and Systems 3 cr. GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. GEOG 120 Human Geography 3 cr. GEOG 240 United States 3 cr. GEOG 250 Introduction to Cartography and GIS 3 cr. GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr. GEOG 401 Senior Colloquium in Geography 3 cr. Directed Electives 6 cr. hrs. Choose 3 credits from the following: GEOG 241 Wisconsin 3 cr. GEOG 242 Canada 3 cr. GEOG 340 Europe 3 cr. GEOG 342 Latin America 3 cr.

GEOG 343 Africa 3 cr. GEOG 344 Asia and Oceania 3 cr. Choose 3 credits from the following: GEOG 212 Weather and Climate 3 cr. GEOG 213 Landforms of North America 3 cr. GEOG 214 World Patterns of Plants and Animals 3 cr. GEOG 220 Economic Geography 3 cr. GEOG 237 Poverty in the United States 3 cr. GEOG 255 Thematic Map Design 3 cr. GEOG 316 The Physical Environment of Urban Areas 3 cr. GEOG 322 Urban Geography 3 cr. GEOG 324 Historical Geography of the United States 3 cr. GEOG 360 Geographic Information Systems: Theory and Methods 3 cr. GEOG 368 Geoprocessing Techniques 3 cr. GEOG 378 Semester Abroad 3-6 cr. GEOG 379 Geography Internship 3-12 cr. GEOG 385 Interdisciplinary Seminar on the American Frontier 3 cr. GEOG 389 Topics in Geography .5-3 cr. GEOG 412 Advanced Climatology 3 cr. GEOG 428 Political Geography 3 cr. GEOG 450 Advanced Map Design and Production 3 cr. GEOG 455 Animated and Interactive Cartography 3 cr. GEOG 460 Advanced Geographic Information Systems 3 cr. GEOG 490 Readings in Geography 1-3 cr. GEOG 499 Independent Study 1-2 cr. Electives: 12 cr. hrs. Must be numbered 200 and above with at least one numbered 400 or above, see courses listed in Directed Electives above.

#### Geography Major - Liberal Arts with a GIS/Cartography Minor - Major Requirements 37 Total Credits

#### Required Courses: 16 cr. hrs.

GEOG 110 Physical Environment: Patterns and Systems 3 cr.

GEOG 111 Lab for Physical Environment: Patterns and Systems 1 c.

GEOG 120 Human Geography 3 cr.

GEOG 240 United States 3 cr.

GEOG 365 Quantitative Techniques for Geographers and Cartographers 3 cr.

GEOG 401 Senior Colloquium in Geography 3 cr. Directed Electives: 6 cr. hrs.

(See Geography Major without a GIS/Cartography Minor)

Electives: 15 cr. hrs. (See Geography Major without a GIS/Cartography Minor) Geography Minor - Liberal Arts

Geography Minor - Liberal Arts: 22 Total Credits

#### Required Courses: 13 cr. hrs.

GEOG 110 Physical Environment: Patterns and Systems 3
cr.
GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr.
GEOG 120 Human Geography 3 cr.
GEOG 240 United States 3 cr.
GEOG 250 Introduction to Cartography and GIS 3 cr.

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. GEOG 111 Lab for Physical Environment: Patterns and Systems 1 cr. GEOG 120 Human Geography 3 cr. GEOG 240 United States 3 cr. GEOG 241 Wisconsin 3 cr. GEOG 250 Introduction to Cartography and GIS 3 cr. General Electives: 6 cr. hrs. (Courses numbered 200 and above)

#### Geographic Information Systems/Cartography Minor GIS/Cartography Minor: 21 Total Credits (with a Geography Major)

#### Required Courses: 12 cr. hrs.

GEOG 250 Introduction to Cartography and GIS 3 cr. GEOG 255 Thematic Map Design 3 cr. GEOG 360 GIS: Theory and Methods 3 cr. GEOG 368 Geoprocessing Techniques 3 cr. Directed Electives: 9 cr. hrs. GROUP A: Choose 6 or 9 credits from the following: GEOG 450 Advanced Map Design and Production 3 cr. GEOG 455 Animated and Interactive Cartography 3 cr. GEOG 460 Advanced GIS 3 cr. GEOG 379 Geography Internship 3-12 cr. GROUP B: If 6 credits were chosen from Group A, then choose 3 credits from the following: GENG 235 Surveying 3 cr. ESM 333 Remote Sensing of Natural Resources 3 cr. ESM 363 GIS Applications in Resource Management 3 cr. ART 225 Advertising Design I 3 cr. CSIS 151 Introduction to Programming 3 cr. CSIS 161 Programming I 3 cr. CSIS 225 Web Development I 3 cr.

#### GIS/Cartography Minor 21 Total Credits (without a Geography Major)

#### Required Courses: 12 cr. hrs.

(See GIS/Cartography Minor with a Geography Major)
Directed Electives: 9 cr. hrs.
GROUP A: (See GIS/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 3 cr.
GENG 235 Surveying 3 cr.
ESM 333 Remote Sensing of Natural Resources 3 cr.
ESM 363 GIS Applications in Resource Management 3 cr.
ART 225 Advertising Design I 3 cr.
CSIS 151 Introduction to Programming 3 cr.
CSIS 161 Programming I 3 cr.
CSIS 225 Web Development I 3 cr.

Updated May, 2007

## **Geology (GEOL)**

## Department of Plant and Earth Science

# College of Agriculture, Food and Environmental Sciences

## 324 Agriculture Science Hall (715) 425-3345 www.uwrf.edu/pes/

Terry L. Ferriss-Chair, William A. Anderson, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove, Michael Crotser, Michael C. Kaltenberg, Kerry L. Keen, Michael D. Middleton, Eric M. Sanden, Brian R. Smith, Donavon H. Taylor, Laine Vignona, Susan J. Wiegrefe, Ian Williams

## General Education Requirements

For College of Agriculture, Food and Environmental Science majors as listed with the following exceptions: Sciences: BIOL 150, GEOL 101, and CHEM 121. For Secondary Education Majors as listed.

## Geology Major

#### Required Geology Courses: 39-40 cr. hrs.

GEOL 102 Introductory Geology Lab 1 cr. GEOL 150 Historical Geology 4 cr. GEOL 230 Mineralogy 4 cr. GEOL 231 Petrology 4 cr. GEOL 285 Sophomore Seminar in Geology (writing intensive) 1 cr. GEOL 326 Structural Geology 4 cr. GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. GEOL 362 Stratigraphy and Sedimentation 4 cr. GEOL 371-376 Any one of the Regonal Field Trip Courses 1-2 cr. GEOL 441 Geophysics 4 cr. GEOL 445 Hydrogeology 3 cr. GEOL 450 Paleontology (writing intensive) 4 cr. GEOL 485 Senior Research Experience (writing intensive) 1 cr. **Required Professional Courses: 19 cr. hrs.** CHEM 122 General Chemistry II 5 cr. MATH 166 Calculus I 4 cr. Choose either sequence A or B below: A. PHYS 151 General Physics I 4 cr. PHYS 152 General Physics II 4 cr. PHYS 156 General Physics Laboratory I 1 cr. PHYS 157 General Physics Laboratory II 1 cr. **B.** PHYS 101 General Physics Laboratory I 1 cr.

PHYS 102 General Physics Laboratory II 1 cr. PHYS 161 General Physics I 4 cr. PHYS 162 General Physics II 4 cr. **Directed Electives: 18 cr. hrs.** (consult with your adviser for these or other selections) CROP 451 Integrated Pest Management 3 cr. CROP 462 Agricultural Ecology 2 cr. ART 307 Computer Graphics as Visual Expression 3 cr. BIOL Any 210 level or higher CHEM Any 230 level or higher CSIS Any computer systems course ENGL 367 Technical Writing 3 cr. ESM Any ESM course 150 or higher, except 300, and 343 GENG Any general engineering course GEOG 250 Cartography I 3 cr. GEOG 255 Cartography II 3 cr. GEOG 360 Introduction to Geographic Information Systems 3 cr. GEOG 365 Quantitative Techniques for Geographers 3 cr. GEOG 368 Geoprocessing Techniques 3 cr. GEOG 412 Advanced Climatology 3 cr. GEOG 450 Advanced Map Design and Production 3 cr. GEOG 460 Advanced Geographic Information Systems 3 cr. GEOL 270 Internship I 2-4 cr. GEOL 370 Internship II 2-4 cr. GEOL 490 Independent Study in Geology 1-3 cr. MATH Any math class 167 or higher PHYS Any physics class 204 or higher SOIL 210 Introductory Soil Science 3 cr. SOIL 325 Hydric Soils and Wetland Environments 3 cr. SOIL 350 Pedology 4 cr. SOIL 440 Soil and Water Conservation 4 cr. SOIL 460 Soil Physics 3 cr. Note: All geology majors must also complete a service learning/professional development requirement. See your adviser for details.

### 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, CSIS 105, Field Geology, GEOL 490 Mineral Exploration: ESM 333, GEOG 250, 360, CHEM 251, 256, Field Geology, GEOL 490 Ocean Sciences: CSIS 105, BIOL 230, 434, MATH 167, CHEM 251, 256, PHYS 311, GEOL 202 Paleontology: MATH 167, CSIS 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

## Earth Science Certification Option -Secondary Education

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.

#### Professional Courses 36-39 cr. hrs.

TED 120 Introduction to Education and Instructional Technology 3 cr. TED 212 Educational Psychology: Middle and Secondary Education 5 cr. TED 414 Development of the Transescent (writing intensive) 3 cr. TED 420 School and Society 3 cr. TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. TED 423 Writing, Speaking and Listening in the Content Area 3 cr. TED 434 Techniques of Middle/Secondary Education: Science 3 cr. TED 473 Student Teaching: Middle Level 1-6 cr. TED 474 Student Teaching: Secondary 1-12 cr. PSYC 330 The Exceptional Child 3 cr. COUN 310 Counseling Skills for Teachers 2 cr. or COUN 410 Introduction to Counseling or 3 cr. Earth Science Courses 42 cr. hrs. GEOL 102 Introductory Geology Lab 1 cr. GEOL 150 Historical Geology 4 cr. GEOL 202 Oceanography 2 cr. GEOL 230 Mineralogy 4 cr. GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. GEOL 305 Geology of the Planets 2 cr. GEOL 330 Meteorology 2 cr. GEOL 450 Paleontology (writing intensive) 4 cr. CHEM 121 General Chemistry I 5 cr. or CHEM 110 Introduction to General Chemistry 6 cr. PHYS 117 Introductory Astronomy 3 cr. PHYS 151 General Physics I 4 cr. PHYS 156 General Physics Laboratory I 1 cr. BIOL 150 General Biology 3 cr. ESM 360 Applied Hydrology and Water Quality 4 cr.

### Geology Minor - 21 Total Credits

#### Required Courses 13 cr. hrs.

GEOL 102 Introductory Geology Lab 1 cr. GEOL 150 Historical Geology 4 cr. GEOL 230 Mineralogy 4 cr. GEOL 231 Petrology 4 cr. **Electives in Geology 8 cr. hrs.** 

Select from 300 or 400 level Geology courses except GEOL 330

See also: Earth Science Minor and Hydrogeology Minor

## Health and Human Performance

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

111 Karges Center (715) 425-3705 www.uwrf.edu/hhp/

Chair-Faye Perkins, Cindy Albert, Debra Allyn, Marius Andahazy, Martha Brennan, Dean Culpepper, Gary Eloranta, Steve Freeman, Bill Henderson, Cindy Hovet, Mari Kline, Andy Kotelnicki, Crystal Lanning, John O'Grady, Reid Perry, Robert Ritzer, Jim Tangen-Foster, Sue Tarr, Karla Zhe

The mission of the Department of Health and Human Performance is to prepare quality teachers, coaches, fitness and recreation leaders who will enrich and support the wellbeing of others; help all individuals live healthy, satisfying, and energetic lives; and cultivate a commitment to physical activity and healthy lifestyle choices.

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 (noncertifiable 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. An Adapted Physical Education minor is also available for students seeking K-12 physical education certification or for teachers who are already certified in K-12 physical education.

## General Education Requirements

As listed on the UWRF website.

## Health and Human Performance Major

### Option I: Comprehensive K-12 Physical Education 53 Total Credits (teacher certifiable)

DANC 120 Fundamentals of Movement Through Dance 1 cr.

DANC 257 Rhythms 2 cr.

DANC 362 Dance for the Elementary School 2 cr.

HEAL 263 Human Anatomy 3 cr. HEAL 366 Exercise Physiology 3 cr.

P ED 161 Intro. to Health and Human Performance 3 cr.

P ED 196 Individual Sports 2 cr.

P ED 198 Team Sports 2 cr.

P ED 201 Outdoor Education Concepts and Skills-Summer Activities 3 cr.

P ED 241 Motor Learning 3 cr.

P ED 245 Motor Development throughout Life 3 cr.

P ED 251 Field Sports 2 cr.

P ED 252 Racquet Sports 2 cr.

P ED 253 Lifetime Sports 2 cr.

P ED 300 Adapted Physical Education 3 cr.

P ED 354 Biomechanics 3 cr.

P ED 375 Physical Activity Behavior 3 cr.

P ED 455 Organization and Administration of Physical Education 3 cr.

P ED 461 Senior Seminar 3 cr.

P ED 465 Scientific Principles of Conditioning 2 cr.

P ED 466 Exercise Leader 1 cr.

SFED 200 First Aid and Basic Life Support 2 cr.

Professional Courses: 38 cr. hrs.

TED 120 Introduction to Education and Instructional Technology 3 cr.

TED 211 or 212 Educational Psychology Elem. or Secondary 5 cr.

TED 252 Multicultural Education 3cr.

TED 420 School and Society 3 cr.

TED 422 Content Area Literacy in Middle/Secondary School 3 cr.

TED 425 Techniques of Elementary ED-PE 3 cr.

TED 435 Techniques of Middle/Secondary Education: Physical Ed. 3 cr.

TED 475 Student Teaching: K-12 12 cr.

PSYC 330 The Exceptional Child 3 cr.

## Option II: Health and Human Performance

Studies 34 Total Credits Minor required (non-certifiable)

Requirements: 32 cr. hrs.

HEAL 263 Human Anatomy 3 cr.

HEAL 315 Nutrition 3 cr.

HEAL 366 Exercise Physiology 3 cr.

P ED 161 Intro to Health and Human Performance 3 cr.

P ED 245 Motor Development throughout Life 3 cr.

P ED 354 Biomechanics 3 cr.

P ED 375 Physical Activity Behavior 3 cr.

P ED 450 Sport, Fitness and Recreation Management 3 cr.

P ED 461 Senior Seminar in Health and Human Performance

#### 3 cr.

P ED 465 Scientific Principles of Conditioning 2 cr. P ED 466 Exercise Leader 1cr. SFED 200 First Aid and Basic Life Support 2 cr. **Directed Electives:** (Select 2 or more credits) HEAL 269 Wellness 3 cr. P ED 109 Recreational Climbing 1 cr. P ED 196 Individual Sports 2 cr. P ED 198 Team Sports 2 cr. P ED 201 Outdoor Ed. Concepts: Summer 3 cr. P ED 202 Outdoor Ed.Concepts: Winter 3 cr. P ED 213 Care and Prevention of Athletic Injury 2 cr. P ED 251 Field Sports 2 cr. P ED 252 Racquet Sports 2 cr. P ED 253 Lifetime Sports 2 cr. P ED 301 Foundations of Outdoor Leadership 3 cr. P ED 351 Coaching Young Athletes 2 cr. P ED 363 Psychology of Coaching 3 cr. SOCI 230 Sociology of Sport and Leisure 3 cr. Professional courses 14 cr. hrs. P ED 271 Practicum I 1 cr. P ED 300 Adapted Physical Education 3 cr. P ED 471 PE Practicum 4<sup>1</sup>2 cr. PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. PSYC 336 Developmental Psychology: Adulthood and

Option III: Health Education 34Total credits

#### Minor required (teacher certification)

Aging 3 cr.

P ED 161 Introduction to Health and Human Performance 3 cr. SFED 200 First Aid and Basic Life Support 2 cr. SFED 330 Safety in Home, School and Community: Promotion and Planning 2 cr. SOWK 250 Use, Abuse, and Addiction 3 cr. HEAL 263 Human Anatomy 3 cr. HEAL 269 Wellness 3 cr. HEAL 315 Nutrition 3 cr. HEAL 350 Community Health 3 cr. HEAL 366 Exercise Physiology 3 cr. HEAL 460 Teaching of Family Life and Sexuality Education 3 cr. HEAL 465 Comprehensive School Health Education Programs 3 cr. P ED 461 Senior Seminar 3 cr. **Required Supporting Course: 3 cr. hrs.** GEOG 300 Environmental Education 3 cr. or ESM 300 Environmental Education Professional Education Requirements: 38 cr. hrs. PSYC 330 Exceptional Child 3 cr. TED 120 Education & Technology 3 cr. TED 212 Educational Psychology: Middle and Secondary Education 5 cr. TED 252 Multicultural Education 3 cr. TED 420 School and Society 3 cr. TED 422 Content Area Literacy in Middle/Secondary School 3 cr.

TED 423 Writing, Speaking and Listening in the Content Area 3 cr. TED 429 Techniques of Secondary Education: Health Education 3 cr. TED 473 Student Teaching: Middle Level 6 cr. TED 474 Student Teaching: Secondary 6 cr.

## **Health Education**

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

111 Karges Center (715) 425-3705 www.uwrf.edu/hhp/

Chair–Faye Perkins, Debra Allyn, Jenn Berna, Richard Bowen, Martha Brennan, Kevin Bullis, Dean Culpepper, Gary Eloranta, Patti Ford, Steve Freeman, Bill Henderson, Cindy Hovet, Crystal Lanning, John O'Grady, Robert Ritzer, Jim Tangen-Foster, Sue Tarr, Karla Zhe Health Education Minor

#### Health Education Minor: 23 Total Credits Required Courses: 23 cr. hrs.

HEAL 262 Human Anatomy and Physiology 3 cr. (or HEAL 263 & 366) HEAL 269 Wellness 3 cr. HEAL 315 Nutrition 3 cr. HEAL 350 Community Health 3 cr. HEAL 460 Teaching of Family Life and Sexuality Education 3 cr. HEAL 465 Comprehensive School Health Education 3 cr. SFED 200 First Aid and Basic Life 2 cr. SOWK 250 Use, Abuse and Addiction 3 cr. **Required supporting course** Choose one of the following: GEOG 300 Environmental Education 3 cr. or ESM 300 Environmental Education Other professional courses and student teaching required for certification: TED 414 Development of the Transescent 3 cr. **Required for Minnesota licensure** TED 429 Techniques of Secondary Education: Health Education 3 cr. TED 473/474 Student Teaching 12 cr.

Updated 06/07/2006

## History (HIST)

## Department of History and Philosophy College of Arts and Sciences

## 307 Kleinpell Fine Arts Building (715) 425-3164 www.uwrf.edu/history

History: Betty Bergland-Chair, Roark Atkinson, Victoria Houseman, Kurt Leichtle, Kiril Petkov and Zhiguo Yang Philosophy: Imtiaz Moosa, David Peters and Heather Wainwright

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 in History is excellent 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 enhance their understanding of the human past. The Broad Field Social Stu dies Major is recommended for secondary teachers in Wisconsin and Minnesota.

## General Education Requirements

BA and BS Liberal Arts majors as listed. BS Education majors as listed.

## History Major–Liberal Arts - 36 Total Credits

#### Core Requirements 6 cr. hrs.

HIST 101 Origins of Civilization (supporting course)\*, 3 cr. HIST 102 Origins of One World, 3 cr. HIST 485 History Seminar, 3 cr. \*Required supporting course; credits apply in GEN. ED. **Required Courses Choose one of the following Non-Western History Courses, 3 cr. hrs.** HIST 201 Introduction to Asian Civilization, 3 cr. HIST 202 Introduction to Latin American Civilizations, 3 cr. HIST 203 The Mediterranean: A Survey, 3 cr. Choose three of the following U.S. History Courses\*\* 9 cr. hrs HIST 204 U.S. Immigration and Ethnic History, 3 HIST 205 Women, s History: United States, 3 HIST 206 Native Americans and the United States, 3 HIST 207 African American History, 3 HIST 215 United States History to 1865, 3 HIST 216 United States History from 1865, 3 \*\*History 215 OR 216 required; both may be taken 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 Select two advanced Electives (numbered 300 or above), 6

## Minor in History-Liberal Arts and Education - 24 Total Credits

#### Required Courses: 12 cr. hrs.

HIST 101 Origins of Civilization, (supporting course)\*, 3 HIST 102 Origins of One World, 3 \*Required supporting course; credits apply in GEN. ED. Choose ONE of the following courses in Non-Western History, 3 HIST 201 Introduction to Asian Civilization, 3 HIST 202 Introduction to Latin American Civilizations, 3 HIST 203 The Mediterranean: A Survey, 3 Choose TWO of the following courses in U.S. History\*\*, 6 HIST 204 U.S. Immigration and Ethnic History, 3 HIST 205 Women, s History: U.S., 3 HIST 206 Native Americans and the United States, 3 HIST 207 African American History, 3 HIST 215 United States History to 1865, 3 HIST 216 United States History from 1865, 3 \*\*One of these must be History 215 OR 216 Directed Electives: 12 cr. hrs. Select four HIST courses numbered 200 or above

## Honors (HON) Interdisciplinary

## 104 North Hall (715) 425-0699 www.uwrf.edu/honors program/

#### Nanette Jordahl-Director

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, 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 UWRF 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 percent 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 UWRF 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. Course requirements inlcude at least one credit of HON 181 and one credit of HON 498

### General Education Honors Courses

Honors program seminars and courses will meet General Education or Liberal Arts requirements whenever applicable.

Sections of General Education courses may be made available on a rotational basis to Honors Program students and often include:

CHEM 230 and 231 ENG 100, 200 and ENG 241 PHYS 117

### Contracted Credits (variable credits)

Any Honors Program students enrolled in a non-honors at the 200 level or above 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 credits. A required form is available in the Honors Program office to gain contracted credit.

### Honors Thesis/Project 1-6 cr. hrs.

Required of all participants during junior or senior year. Participants must submit a project or equivalent creative or scholarly projects in the Humanities, Fine Arts, Social Sciences and Education, 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. 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 UWRF Collegiate Honors Society, 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. Service Learning is graded on a pass/fail basis.

### 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. Events are graded on a pass/fail basis.

Updated April, 2007

## **Horticulture (HORT)**

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

## 324 Agriculture Science Hall (715) 425-3345 www.uwrf.edu/pes/

Terry L. Ferriss-Chair, William A. Anderson, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove, Michael Crotser, Michael C. Kaltenberg, Kerry L. Keen, Michael D. Middleton, Eric M. Sanden, Brian R. Smith, Donavon H. Taylor, Laine Vignona, Susan J. Wiegrefe, Ian Williams

## General Education Requirements

As listed.

### Foundation Courses in Agriculture 12 cr. hrs.

CROP 161 Introduction to Plant Science 3 cr. or HORT 161 Introduction to Plant Science AGEN 150 Agricultural and Environmental Engineering Technology 3 cr. SOIL 210 Introductory Soil Science 3 cr. AGEC230 Agricultural Economics I 3 cr. or FDSC 112 Introduction to Food Science

#### Horticulture Major: 64-68 Total Credits Required Core HORT Courses: 16 cr. hrs.

HORT 169 Introduction to Horticulture 3 cr. HORT 200 Plant Propagation 3 cr. HORT 310 Greenhouse Management 3 cr. HORT 352 Ornamental Plants 3 cr. HORT 455 Turfgrass Science and Management 3 cr. HORT 485 Senior Seminar in Horticulture 1 cr. Required Related Courses: 20 cr. hrs. SOIL 311 Soil Fertility 4 cr. BIOL 314 Plant Pathology 3 cr. CHEM 230 General Organic Chemistry 3 cr. AGBI 251 Agricultural Biochemistry 3 cr. CROP 435 Crop Physiology 4 cr. CROP 257 Genetics 3 cr. or ANSC 257 Genetics

## Horticulture Options (Choose one)

## Professional Horticulture Option 28-31 cr.

hrs.

BIOL 333 Entomology 3 cr. HORT 327 Vegetable Science and Production (writing intensive) 4 cr. HORT 347 Fruit Science and Production (writing intensive) 4 cr. HORT 420 Floriculture (writing intensive) 4 cr. HORT 270/370 Horticulture Internship 4 cr. Select one design-related course from the following: HORT 245 Interior Plantscapes 3 cr. or HORT 250 Principles of Landscape Design 3 cr. or HORT 268 Herbaceous Perennials 3cr. Select one plant production-related course from the following: HORT 369 Plant Tissue Culture: Theory and Practice 3 cr.

or HORT 452 Arboriculture/Nursery Management 3 cr. (writing intensive)

or AGEC 361 Horticulture Business Practices 3 cr. Directed Electives: 3 cr. hrs.

## Landscape Design and Contracting Option

31-32 cr. hrs. AGEN 333 Landscape Construction 3 cr. ESM 151 Introduction to Land Use Theory and Practice 3 cr. HORT 250 Principles of Landscape Design 3 cr. HORT 268 Herbaceous Perennials 3 cr. HORT 270/370 Horticulture Internship 4 cr. HORT 452 Arboriculture/Nursery Management (writing intensive) 3 cr. AGEC 361 Horticulture Business Practices 3 cr. or AGEC 410 Professional Selling 3 cr. GENG 368 CAD Applications 3 cr. HORT 327 Vegetable Science and Production (writing intensive) 4 cr. or HORT 347 Fruit Science and Production (writing intensive) 4 cr. HORT 358 Landscape Design Practicum 2 cr. or SOIL 325 Hydric Soils and Wetland Environments 3 cr.

## **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 361 Horticulture Business Management 3 cr. Select one from: ACCT 231 Principles of Accounting I 3 cr. AGEC 305 Agricultural BusinessAccounting 3 cr. Select one from: BLAW 265 Business Law I 3 cr. AGEC 345 Agricultural Law 3 cr. Select two from: AGEC 355 Agricultural Markets and Prices 3 cr. AGEC 410 Professional Selling 3 cr. AGEC 468 Agribusiness Firm Management 3 cr.

CSIS 215 Information Systems for Management 3 cr. MNGT 330 Diversity in the Workplace 3 cr. FINC 345 Managerial Finance 3 cr.

## Horticulture Minor: 22-23 Total Credits

Required Courses: 19 cr. hrs. HORT 169 Introduction to Horticulture 3 cr. HORT 200 Plant Propagation 3 cr. HORT 310 Greenhouse Management 3 cr. HORT 352 Ornamental Plants 3 cr. BIOL 314 Plant Pathology 3 cr. Select one from: HORT 327 Vegetable Science and Production 4 cr. HORT 347 Fruit Science and Production 4 cr. 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 www.uwrf.edu/pes/

Terry L. Ferriss-Chair, William A. Anderson, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove, Michael Crotser, Michael C. Kaltenberg, Kerry L. Keen, Michael D. Middleton, Eric M. Sanden, Brian R. Smith, Donavon H. Taylor, Laine Vignona, Susan Wiegrefe, Ian Williams

#### Hydrogeology Minor: 21 Total Credits Required Courses 17 cr. hrs.

ESM 360 Applied Hydrology and Water Quality 4 cr. ESM 412 Fate and Transport of Chemicals on the Environment 3 cr. ESM 413 Environmental Analysis 4 cr. GEOL 445 Hydrogeology 3 cr. SOIL 460 Soil Physics 3 cr. Electives-Select from the following: 4 cr. hrs. CHEM 230 General Organic Chemistry 3 cr. CHEM 251 Analytical Chemistry 2 cr. CHEM 256 Analytical Chemistry Lab 1 cr. CHEM 356 Chemical Instrumentation Lab (writing intensive) 1 cr. CHEM 452 Instrumental Analysis 3 cr. BIOL 324 Microbiology 4 cr. GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. GEOL 362 Stratigraphy and Sedimentation 4 cr. GEOL 441 Geophysics 4 cr. SOIL 325 Hydic Soils and Wetland Environments 3 cr.

## **International Studies** (**INTS**) Interdisciplinary Program

## (715) 425-3318/3798 www.uwrf.edu/international\_studies

International Studies Program Committee: Chair-Wes Chapin, political science; Cecilia Bustamante, modern language; Clair Kilian, business administration; Charles Rader, geography; Ogden Rogers, social work; David Trechter, agricultural economics

The primary mission of the International Studies Program is to create global awareness by providing students with the intellectual skills and substantive knowledge necessary to meet the global challenges of the 21st Century.

The International Studies Program is designed to:

Provide students with the knowledge and skills they need to compete in the global community,

Promote critical thinking and problem solving from an interdisciplinary perspective,

Introduce students to a foreign language and encourage the development of competency,

Increase global awareness and understanding of cultural differences,

Encourage students to participate in study-abroad and overseas experience programs, and more . . .

Students may complete a first major in international studies within either the College of Agriculture, Food and Environmental Sciences or the College of Arts and Sciences. Students in either the College of Business and Economics or the College of Education and Professional Studies can complete the major as a second major. Students in all colleges can complete an international studies minor. Students must complete the appropriate BA or BS requirements for their respective colleges.

### International Studies Major: 36 Total Credits

#### Required Courses: 21 cr. hrs.

INTS 200 Introduction to International Studies 3 cr. AGEC 250 World Food and Population 3 cr. ECON 150 International Economic Issues 3 cr. GEOG 120 Human Geography 3 cr. HIST 102 Origins of One World 3 cr. POLS 260 Introduction to International Relations 3 cr. INTS 480 Senior Seminar 3 cr. Students must complete a study-abroad experience as part of the directed electives. **Directed Electives: 15 cr. hrs.** Select 15 credits from at least three of the seven categories A-G listed below.

No more than 9 credits can come from any one of categories A-F.

No more than 3 credits can come from category G. One course must be selected from category F. Credit for INTS 379, 389, 490, or 499 can be applied to these categories after consultation with the chair.

#### **Supporting Course Requirement:**

Students complete two years of a foreign language of their choice; e.g., complete any two-year language at UWRF, complete testouts equivalent to two years, or complete two years at another accredited university and transfer the credits to UWRF.

### International Studies Minor: 24 Total Credits

#### Required Courses: 21 cr. hrs.

INTS 200 Introduction to International Studies 3 cr. AGEC 250 World Food and Population 3 cr.

GEOG 120 Human Geography 3 cr.

POLS 260 Introduction to International Relations 3 cr. **Directed Electives: 12 cr. hrs.** 

Select 12 credits from at least three of the seven categories A-G.

No more than 6 credits can come from any of categories A-F. No more than 3 credits can come from category G.

Credit for INTS 379, 389, 490, or 499 can be applied to these categories after consultation with the chair.

#### **Supporting Course Requirement:**

Students complete one year of a foreign language of their choice; e.g., complete any one-year language at UWRF, complete testouts equivalent to one year, or complete one year at another accredited university and transfer the credits to UWRF.

#### Category A

ART 314 Art of India, China, and Japan 2 cr. ART 318 Latin American Art 2 cr. ENGL 341 European Literature 3 cr. ENGL 428 Modern British Literature: 1940-Present 3 cr. ENGL 441 Twentieth Century International Literature 3 cr. ENGL/FILM/INTS 442 World Cinema 3 cr. HUM 256 Arts and Ideas II 4 cr. HUM 261 World Arts 1 cr. MUS 300 World Music 3 cr. SCTA 313 Intercultural Communication 3 cr.

#### **Category B**

HIST 303 Women's History: Europe 3 cr. HIST 305 Women's History: Global Perspectives 3 cr. HIST/PHIL/POLS 308 Western Political Thought: The Renaissance through Marx 3 cr. HIST/PHIL/POLS 309 Western Political Thought: Nietzsche to the Present 3 cr. HIST 327 World War I to World War II 3 cr. HIST 328 World War II to the Cold War 3 cr. HIST 330 Revolutions in Modern History 3 cr. HIST 334 Modern China, 1800 to the Present 3 cr. HIST 335 Modern Japan, 1600 to the Present 3 cr. HIST/POLS 349 Modern Middle East History and Politics 3 cr. HIST 359 U.S. History from 1945 3 cr. HIST/POLS 367 History of U.S. Foreign Policy 3 cr. HIST 436 History of Colonialism and Imperialism 3 cr. POLS 344 Politics of the Developing World 3 cr. POLS 346 Politics of Western Europe 3 cr. POLS 348 Politics of East Asia 3 cr. POLS 364 International War and Peace 3 cr. POLS 365 American Foreign Policy 3 cr. POLS 369 Politics of the World Economy 3 cr. POLS 377 The United Nations (may be taken three times) 1 cr

#### **Category C**

ANTH/SOCI 211 Sociology of Childhood 3 cr. ANTH/SOCI 221 Global Perspectives on Women 3 cr. ANTH/SOCI 338 Global Perspectives on Health and Disease 3 cr. ANTH/SOCI 348 Faces of Culture 3 cr. ANTH/SOCI 435 Social and Cultural Change 3 cr. GEOG 220 Economic Geography 3 cr. GEOG 242 Canada 3 cr. GEOG 340 Europe 3 cr. GEOG 342 Latin America 3 cr. GEOG 343 Africa 3 cr.

GEOG 344 Asia and Oceania 3 cr. SOCI 340 Sociology of Rural Life 3 cr.

#### **Category D**

AGEC 441 Agricultural Policy II 3 cr. ECON 328 Domestic Topics in Third World Economic Development 3 cr. ECON 329 International Topics in Third World Economic Development 3 cr. ECON 340 Contemporary International Trade Issues 3 cr. ECON 342 International Finance 3 cr. ECON 344 Comparative Economic Systems 3 cr. MNGT 355 International Business 3 cr. JOUR 460 International Marketing 3 cr. JOUR 460 International Communication 3 cr. MNGT 310 Culture and Business 3 cr. MNGT 355 International Business 3 cr. MNGT 355 International Business 3 cr. MNGT 356 International Business 3 cr.

#### **Category E**

FREN 301 French Conversation and Composition 3 cr. FREN 302 French Conversation and Composition II 3 cr. FREN 341 French Civilization 3 cr. FREN 342 Modern France and Francophone Cultures 3 cr. FREN 351 Survey of French Literature to 1800 3 cr. FREN 352 Survey of French Literature 1800 to Present 3 cr. FREN 401 Advanced French Communication 3 cr. FREN 451 French Prose Fiction 3 cr. or FREN 452 French Poetry or FREN 453 French Drama GERM 275 Business German 3 cr. GERM 301 German Conversation and Composition 3 cr. GERM 302 German Conversation and Composition II 3 cr. GERM 341 German Civilization 3 cr. GERM 342 Modern German-Speaking Cultures 3 cr. GERM 351 Survey of German Literature to Classicism (1800) 3 cr. GERM 352 Survey of German Literature from Classicism (1800) to Present 3 cr. GERM 401 Advanced German Communication 3 cr. GERM 451 German Drama and Theater 3 cr. or GERM 452 German Tale, Short Story, and Novella or GERM 453 German Poetry SPAN 301 Spanish Composition and Conversation 3 cr. SPAN 302 Spanish Composition and Conversation II 3 cr. SPAN 341 Spanish Civilization to 1800 3 cr. SPAN 342 Spanish Civilization 1800 to Present 3 cr. SPAN 345 Latin American Civilization to 1800 3 cr. SPAN 346 Latin American Civilization 1800 to Present 3 cr. SPAN 351 Survey of Spanish Literature Siglo De Oro 3 cr. SPAN 352 Survey of Spanish Literature 1898 to Present 3 cr. SPAN 355 Survey of Latin American Literature, Conquest to Independence 3 cr. SPAN 356 Survey of Latin American Literature Independence to Present 3 cr. SPAN 401 Advanced Spanish Communication 3 cr. SPAN 452 Advanced Spanish Literature 3 cr. SPAN 455 Advanced Latin American Literature 3 cr.

#### Category F.

ART/ENGL 376 Experience Greece: Culture Past and Present 1-3 cr.
HIST 371 Study Tour Research 1-3 cr.
INTS 370 International Study Tour 1-3 cr.
INTS 377 Semester Abroad 6 cr.
MODL 376 Mexico: A Cultural Experience 3 cr.
MODL 377 Foreign Study 6 cr.
271 CAFES depts. International Internship 4 cr.
TED Education Teaching courses Overseas Practice Teaching 6 cr.
378 within depts. Semester Abroad Research 3-6 cr.

#### Category G

ANTH 100 Introduction to Anthropology 3 cr. DANC 100 History/Appreciation of Dance 3 cr. ECON 150 International Economic Issues 3 cr. (course required for major, allowed as an elective in minor) ESM 105 Introduction to Environmental Studies 3 cr. GEOG 212 Weather and Climate 3 cr. GEOG 214 World Patterns of Plants and Animals 3 cr. GEOL 202 Oceanography 2 cr. GEOL 269 Environmental Geology 2 cr. HIST 102 Origins of One World 3 cr. (course required for major, allowed as an elective in minor) HIST 201 Introduction to Asian Civilization 3 cr. HIST 202 Introduction to Latin American Civilizations 3 cr. POLS 245 Introduction to Comparative Politics 3 cr.

# Journalism (JOUR)

Department of Journalism College of Arts and Sciences

## 310 North Hall (715)425-3169 www.uwrf.edu/journalism/

Colleen Callahan-chair, Patricia Berg, Sandra Ellis, Richard McNamara, Andris Straumanis. Adjunct: Richard Burgsteiner.

The Department of Journalism is one of 109 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 Speech Communication and Theatre Arts department. All journalism majors must take six supporting courses outside the major, specified under the Supporting Courses category. These six courses may be counted in other areas of the student's degree program such as General Education, Liberal Arts, a second major, a minor, or general electives.

Journalism majors must take PSYC 201 or MATH 216 to fulfill the General Education Goal 3 (mathematics requirement).

Journalism courses cannot double count in both the journalism major and general education. Students must take courses other than journalism to meet their general education goals.

**Journalism and Secondary Education**. Students interested in teaching journalism and/or serving as a newspaper or yearbook advisor at the secondary school level may major or minor in journalism, and must take a second teaching area major such as English or broad area studies. The student should consult with the dean of the College of Education and Professional Studies for specific teaching requirements.

**Journalism and Agriculture**. This program is designed for students who wish to pursue a career in agricultural journalism. The student develops a major in journalism and a second major or minor in the College of Agriculture, Food and Environmental Sciences. Students may take AGED 230 (Agricultural News Writing) as a journalism elective. **Marketing Communications Major**. Journalism is one of seven academic departments participating in the interdisciplinary major of Marketing Communications.

**International Studies Major.** Journalism offers a directed elective (JOUR 460) that may count toward an International Studies major.

**Film Studies Minor.** Journalism is one of the departments from which courses may be taken for the Film Studies minor.

**Professional Writing Minor**. Journalism is one of the subject fields included in the Department of English Professional Writing minor.

### Journalism Major - 35 cr. hrs.

#### Core Requirements: 23 cr. hrs.

JOUR 101 Introduction to Mass Communication 3 cr. JOUR 110 Principles of Journalism 3 cr. JOUR 201 Information Gathering 3 cr. JOUR 202 Print News Writing or 203 Broadcast News Writing 3 cr. JOUR 304 News Practicum (2 semesters) 4 cr. JOUR 465 Mass Communication Law 3 cr. Two of the following production courses: 4 cr. JOUR 121 Radio News Production 2 cr. JOUR 122 TV News Photography 2 cr. JOUR 123 Editing for Print Media 2 cr. JOUR 124 Editing for Online Media 2 cr. Theory Courses : Select two from the following: 6 cr. JOUR 301 History of Film JOUR 302 History of Documentary JOUR 305 News in the Movies JOUR 316 Media Ethics JOUR 319 The Media and American Politics JOUR 320 Journalism and Public Opinion JOUR 345 History of Mass Communication JOUR 455 Mass Media and Society JOUR 460 International Communication Journalism Electives: 6 cr. Any JOUR course. **Required Supporting Courses:** POLS 253 State and Local Government or POLS 211 Government and Politics in Minnesota and Wisconsin HIST 100 Defining Events in US History MATH 216 Elementary Statistical Concepts or PSYCH 201 **Behavioral Statistics** Plus three of the following (each from different departments): GEOG 120 Human Geography or 220 Economic Geography HIST any international course INTS any course ECON 201 Principles of Microeconomics or 202 Principles of Macroeconomics

ESM 105 Introduction to Environmental Studies or 307 Cultural Perspectives on the Environment ETHN 200 Introduction to Ethnic Studies PHIL 245 Eastern Religions and Islam POLS 212 The Politics of Equality and Inequality in The United States POLS Any international course PSYCH 285 Psychology of Prejudice and Racism

#### Journalism Minor - 24 cr.

#### Core Requirements 19 cr.

JOUR 101 Introduction to Mass Communication 3 cr. JOUR 110 Principles of Journalism 3 cr. JOUR 201 Information Gathering 3 cr. JOUR 202 Print News Writing or 203 Broadcast News Writing 3 cr. JOUR 304 News Practicum (1 semester) 2 cr. JOUR 465 Mass Communication Law 3 cr. One of the following production courses: 2 cr. JOUR 121 Radio News Production 2 cr. JOUR 122 TV News Photography 2 cr. JOUR 123 Editing for Print Media 2 cr. JOUR 124 Editing for Online Media 2 cr. Theory Courses : Select one from the following: 3 cr. JOUR 302 History of Documentary JOUR 316 Media Ethics JOUR 319 The Media and American Politics JOUR 320 Journalism and Public Opinion JOUR 345 History of Mass Communication JOUR 455 Mass Media and Society JOUR 460 International Communication Journalism Electives: 2 cr.

Updated 02/08/2007

## Land Use Planning

## Department of Plant and Earth Science College of Agriculture, Food and

# Environmental Sciences

### 324 Agriculture Science Hall (715) 425-3345 www.uwrf.edu/pes/

Terry L. Ferriss-Chair, William A. Anderson, Kelly D. Cain, Steven K. Carlson, William S. Cordua, Dennis R. Cosgrove, Michael Crotser, Michael C. Kaltenberg, Kerry L. Keen, Michael D. Middleton, Eric M. Sanden, Brian R. Smith, Donavon H. Taylor, Laine Vignona, Susan J. Wiegrefe, Ian Williams.

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 with the following exceptions: Ethical Citizenship: ESM 105 Sciences: BIOL 105; CHEM 121

## Land Use Planning Major

#### Land Use Planning Core 37-39 cr. hrs.

ESM 151 Introduction to Land Use Theory and Practice 3 cr. ESM 220 Environmental Sustainability: Theory, Issues, and Management 3 cr.

ESM 270 Internship I 2-4 cr.

ESM 303 Environmental Policies and Administration 3 cr.

ESM 305 Environmental Impact Assessments 2 cr.

ESM 307 Multicultural Perspectives on the Environment 3 cr.

ESM 333 Remote Sensing of Natural Resources 3 cr.

ESM 363 GIS Application in Resource Management 3 cr.

ESM 393 Comprehensive Planning 3 cr.

ESM 411 Site Planning and Development 4 cr.

ESM 435 Advanced Land Use Planning and Design 4 cr.

ESM 485 Seminar in Resource Management 1 cr.

SOIL 210 Introductory Soil Science 3 cr.

#### Support Courses 18 cr. hrs.

GENG 265 Engineering Graphics 3 cr. GEOG 250 Introduction to Cartography and GIS 3 cr. GEOG 360 GIS: Theory and Methods 3 cr. SCTA 208 Problem Solving in Small Group Communication 3 cr. or SCTA 211 Public Speaking or AGED 202 Leadership and Group Dynamics ENGL 367 Technical Writing 3 cr. or ENGL 266 Business Writing 3 cr. GEOL 101 Introduction to Geology 3 cr. **Directed Electives: 24 cr. hrs.** AGEC 230, 231, 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; 312 ESM 109, 343, 360, 365; FINC 335, 350; GENG 121, 201, 235, 236, 368; GEOG All except 110, 120, 237, 250, 344, 360, 385; GEOL 445; HEAL 350; HIST All except 100, 101, 102, 103, 104, 201, 202, 203, 206, 207.385: HORT All; INTS 377; MATH 326, 356, 357; MGNT 150, 310; MODL 377; PHIL 303; POLS All except 114, 212, 245, 260; SCTA 106, 207, 222; SOCI All except 100, 208, 225; SOIL All except 210; SOWK 205, 215, 260, 300 General Electives: 2 - 4 cr. hrs.

## Land Use Planning Minor

## Land Use Planning Minor: 23 Total Credits Required Courses:

ESM 151 Introduction to Land Use Theory and Practice 3 cr. ESM 303 Environmental Policies and Administration 3 cr. ESM 363 GIS Applications in Resource Management 3 cr. ESM 393 Comprehensive Planning 3 cr. ESM 411 Site Planning and Development 4 cr. ESM 435 Advanced Land Use Planning and Design 4 cr. GEOG 250 Introduction to Cartography and GIS 3 cr.

## Language Arts/Reading Department of English College of Arts and Sciences

## 245 Kleinpell Fine Arts Building (715) 425-3537 www.uwrf.edu/english/

Laura Zlogar-Chair, Jennifer Brantley, David Furniss, Greta Gaard, Larry Harred, Mialisa Hubbard Kathleen Hunzer, Nicholas Karolides, Annette Klemp, Steven Luebke, Richard McNamara, James Mulvey, Ronald Neuhaus, Michelle Parkinson, Vladimir Pavlov, Elizabeth Schneider-Rebozo, Robyne Tiedeman, Marshall Toman, Ruth Wood

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, adviser for the minor.

### Language Arts/Reading Minor

#### Minor Requirements 24 Total Credits Required Courses: 18 cr. hrs.

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

Updated 02/08/2007

## Marketing Communications (MARC) Interdisciplinary

## 310 North Hall (715) 425-3899, FAX (715) 425-0658 www.uwrf.edu/marcomm/

Stephen Olsen-Chair, Marketing Communications; David Furniss, English; Michael Padgett, art; Daryll Miller, business administration; Lewis May, agricultural economics; Colleen Callahan, journalism; James Pratt, speech communication and theatre arts; Tracy O'Connell, Marketing Communications.

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 (as a second major) in the College of Business and Economics. Please consult your DAR for college-specific course requirements. It is recommended that a student completing the major in CAS or CAFES have a minor in that college. Students with a Business Administration minor will have CAS as their MARC major college. A minor is not offered in marketing communications.

## General Education Requirements

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 adviser for further information.

#### **Other requirements:**

**Portfolio:** Prior to graduation, students must complete and present a professional portfolio for approval to the marketing communications unit.

**Internship**: 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.

**GPA:** Students must maintain a 2.50 grade point average in the Marketing Communications Major.

## Marketing Communications Major

#### Marketing Communications Major: 39 Total Credits

#### Core Requirements: 25-28 cr. hrs.

ART 225 Advertising Design I 3 cr. MARC 100 Writing for the Mass Media 3 cr. MARC 200 Introduction to Marketing Communications 3 cr. MARC 480 Seminar in Theory and Methods of Marketing Communications 3 cr. MKTG 311 Principles of Marketing for Marketing Communications Majors 3 cr. MKTG 312 Consumer Behavior 3 cr. SCTA 311 Persuasion 3 cr.

## Choose one of the following internship courses: 2-4 cr. hrs.

MARC 379 Internship in Marketing Communications or MARC 279 Cooperative Education/Directed Work Experience or any CAFES department 270/370 internship MARC 279/379 may be combined and/or repeated for a total of 4 credit hours.

#### Directed Electives: 14-17 cr. hrs.

#### Writing Electives-Select one from:

AGED 230 Agricultural News Writing 3 cr. or JOUR 230 Agricultural News Writing ENGL 266 Business Writing 3 cr. ENGL 367 Technical Writing 3 cr. JOUR 351 Editing for Print Media 3 cr.

#### Visual Electives-Select one from:

ART 235 Intro to Black and White Photography 3 cr. JOUR 240 Introduction to Visual Communication 3 cr. SCTA 160 TV Studio Production 3 cr. SCTA 260 Electronic Field Production 3 cr.

#### Marketing/Promotion Electives-Select one from:

AGEC368 Professional Selling 3 cr. MKTG 365 Marketing Research 3 cr. MARC 360 Advertising Principles 3 cr. MARC 370 Principles of Public Relations 3 cr.

#### **Other Electives:**

Select from the following courses or consult with department chair or adviser 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. AGEC 368 Professional Selling 3 cr. AGED 230 Agricultural News Writing 3 cr. ART 235 Introduction to Black and White Photography 3 cr. ART 303 Advertising Design II 3 cr. ENGL 266 Business Writing 3 cr. ENGL 367 Technical Writing 3 cr. JOUR 230 Agricultural News Writing 3 cr. JOUR 240 Introduction to Visual Communication 3 cr. JOUR 351 Editing for Print Media 3 cr. JOUR 465 Mass Communications Law 3 cr. MARC 360 Advertising Principles 3 cr. MARC 361 Advertising Methods 3 cr. MARC 370 Introduction to Public Relations 3 cr. MARC 371 Public Relations Methods 3 cr. MKTG 352 Business to Business Marketing 3 cr. MKTG 355 International Marketing 3 cr. MKTG 365 Marketing Research 3 cr. PHIL 316 Media Ethics 3 cr. SCTA 316 Organizational Communication 3 cr. MARC 389 Semester Abroad 3 cr.

#### **Three Required Supporting Courses:**

One Statistics Course (MATH 216, PSYC 201, ECON 226, MATH 226, AGEC 320, ANSC 341, or an equivalent course) JOUR 101 -- Introduction to Mass Communications SCTA 116 -- Business and Professional Communication (CAS/CBE); AGED 110 -- Agricultural Communications (CAFES)

Updated May, 2007

## **Mass Communication**

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

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

Barbara L. Werner–Chair, Suzanne Hagen, Robin Murray, James Pratt, Ronald Snell, Kenneth Stofferahn, Margaret M. Swanson, James Zimmerman Mass Communication Minor

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

## 207 North Hall (715) 425-3326 www.uwrf.edu/math

Robert Coffman-Chair, Keith Chavey, Kathryn Ernie, Ioana Ghenciu, Joyce Hague, Joyce Kapszukiewicz, Pamela Katzman, Laurel Langford, Don Leake, Stephen List, Kathy Tomlinson, Alexandru Tupan, David Yurchak.

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 specialized preparation in mathematics and professional training required to obtain teacher certification.

General Education Requirements

BA and BS Liberal Arts majors as listed. BS Education majors as listed.

### Mathematics Major - Liberal Arts: 37 Total Credits

Required Courses: 19 cr. hrs. MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. MATH 236 Discrete Mathematics 4 cr. MATH 256 Linear Algebra 3 cr. MATH 266 Calculus III 3 cr. MATH 485 Seminar in Mathematics (writing intensive) 1 cr. Directed Electives: 18 cr. hrs. Select at least six mathematics courses numbered higher than 300, excluding Math 305 and 436 Required Supporting Courses: 3 cr. hrs. select one from MATH 205 Mathematical Programming 3 cr. or CSIS 162 Programming II 3 cr.

#### Mathematics Major - Education Professional Education Courses 39 cr. hrs.

TED 120 Introduction to Education and Instructional Technology 3 cr. TED 212 Educational Psychology 5 cr. TED 438 Techniques in Middle/Sec. Education: Mathematics 3 cr. TED 420 School and Society 3 cr. TED 422 Content Area Literacy in Middle and Secondary Schools 3 cr. TED 423 Writing, Speaking and Listening in the Content Area 3 cr. PSYC 330 Exceptional Child 3 cr. TED 474 Student Teaching-Secondary Only 12 cr. or TED 473 & 474 Student Teaching-Middle/Secondary (6 cr. each) TED 414 Development of the Transescent 4 cr.

#### Major Requirements 36 Total Credits Required Courses: 30 cr. hrs.

MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. MATH 236 Discrete Mathematics 4 cr. MATH 256 Linear Algebra 3 cr. MATH 266 Calculus III 3 cr. MATH 351 Abstract Algebra 3 cr. MATH 356 Probability 3 cr. MATH 356 Probability 3 cr. MATH 411 Geometry 3 cr. MATH 326 Applied Statistics 3 cr. or MATH 357 Mathematical Statistics 3 cr.

### Directed Electives: 6 cr. hrs.

Select at least two mathematics courses numbered higher than 300, excluding MATH 305, 371, 379 and 436

### Required Supporting Courses: 5 cr. hrs.

MATH 436 History of Mathematics (writing intensive) 2 cr. MATH 305 Integrating Technology in Teaching Secondary Mathematics 3 cr.

### Mathematics Minor - Liberal Arts: 24 Total Credits

Required Courses: 18 cr. hrs. MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. MATH 236 Discrete Mathematics 4 cr. MATH 256 Linear Algebra 3 cr. MATH 266 Calculus III 3 cr. Directed Electives: 6 cr. hrs. Select at least two mathematics courses numbered higher than 300, excluding MATH 305 436 Required Supporting Courses: 3 cr. hrs. select one from MATH 205 Mathematical Programming 3 cr. CSIS 162 Programming II 3 cr.

PHYS 211 Scientific Programming 3 cr.

## Mathematics Minor - Education: 24 Total

Credits Required Courses: 21 cr. hrs. MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. MATH 236 Discrete Mathematics 4 cr. MATH 256 Linear Algebra 3 cr. MATH 326 Applied Statistics 3 cr. MATH 411 Geometry 3 cr. Directed Electives: 3 cr. hrs. Select one mathematics course numbered 266 or higher excluding MATH 279, 305, 371, 379 and 436 **Required Supporting Courses: 5 cr. hrs.** MATH 305 Integrating Technology in Teaching Mathematics 3 cr. MATH 436 History of Mathematics 2 cr. Professional Courses (in addition to the major) 3 cr. hrs. TED 438 Techniques in Middle/Sec. Education: Mathematics 3 cr. Additional Courses for Middle School Certification 5 cr. hrs. TED 414 Development of the Transescent 3 cr. COUN 310 Counseling Skills for Teachers 2 cr.

### Mathematics Minor - For Elementary

Education Majors - 22-23 Total Credits **Required Courses: 16 cr. hrs.** MATH 166 Calculus I 4 cr. MATH 216 Elementary Statistical Concepts 3 cr. MATH 236 Discrete Mathematics 4 cr. MATH 248 Elementary Mathematics from an Advanced Standpoint 3 cr. MATH 436 History of Mathematics 2 cr. Directed Electives: 6-7 cr. hrs. select two of the following MATH 167 Calculus II 4 cr. MATH 256 Linear Algebra 3 cr. MATH 260 LOGO for Teachers 3 cr. MATH 306 Number Theory 3 cr. MATH 336 Combinatorics and Graph Theory 3 cr. MATH 351 Abstract Algebra 3 cr. MATH 356 Probability 3 cr. MATH 361 Symbolic Logic 3 cr. MATH 411 Geometry 3 cr.

#### Mathematics Minor - Business or Social

Science - 24 Total Credits Required Courses: 18 cr. hrs. MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. MATH 236 Discrete Mathematics 4 cr. MATH 256 Linear Algebra 3 cr. MATH 226 Fundamental of Statistics 3 cr. or MATH 326 Applied Statistics Directed Electives: 6 cr. hrs. Select two mathematics courses numbered 300 or higher, excluding MATH 305, 326 and 436

## Modern Language (MODL)

## Department of Modern Language College of Arts and Sciences

## 284 Kleinpell Fine Arts Building (715) 425-3121 www.uwrf.edu/modlang/

Peter Johansson-Chair, Cecilia Bustamante, Kristine Butler, Margarita Hendrickson, Monika 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.

## General Education Requirements

BA and BS Liberal Arts majors as listed; BS Education majors as listed.

## Modern Language Major - Liberal Arts: 34 Total Credits

French Option-Liberal Arts Required Courses: 19 cr. hrs. FREN 102 Beginning French II 4 FREN 201 Intermediate French I 3 FREN 202 Intermediate French II 3 FREN 301 Conversation and Composition I 3 FREN 302 Conversation and Composition II 3 FREN 401 Advanced French Communication 3 **Directed Electives: 15 cr. hrs** Select 12 credits from: FREN 316 French Cinema 3 FREN 341 French Civilization 3 FREN 342 Modern France and Francophone Cultures 3 FREN 351 Survey of French Literature to 1800 3 FREN 352 Survey of French Literature 1800 to present 3 Select 3 credits from: FREN 451 French Prose Fiction 3 FREN 452 French Poetry 3

FREN 453 French Drama 3 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 FREN 201 Intermediate French I 3 FREN 202 Intermediate French II 3 FREN 301 Conversation and Composition I 3 FREN 302 Conversation and Composition II 3 FREN 316 French Cinema 3 FREN 341 French Civilization 3 FREN 342 Modern France and Francophone Cultures 3 FREN 351 Survey of French Literature to 1800 3 FREN 352 Survey of French Literature 1800 to present 3 FREN 401 Advanced French Communication 3 Required supporting courses not part of major: 6 cr. hrs. FREN 350 French Phonetics 2 TED 437 Techniques of Middle/Secondary Education: Modern Language 2 TED 448 Techniques of Elementary Education: Modern Language 2

#### German Option-Liberal Arts Required Courses: 19 cr. hrs.

GERM 102 Beginning German II 4 GERM 201 Intermediate German I 3 GERM 202 Intermediate German II 3 GERM 301 Conversation and Composition I 3 GERM 302 Conversation and Composition II 3 GERM 401 Advanced German Communication 3 Directed Electives: 15 cr. hrs. Select 12 credits from: GERM 275 Business German 3 GERM 315 German Classic and Modern Film 3 GERM 341 German Civilization 3 GERM 342 Modern German-speaking Cultures 3 GERM 351 Survey of German Literature to Classicism 3 GERM 352 Survey of German Literature from Classicism to Present 3 Select 3 credits from: GERM 451 German Drama and Theatre 3 GERM 452 German Tale, Short Story and Novella 3 GERM 453 German Poetry 3 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: 6 cr. hrs.** GERM 350 German Phonetics 2 TED 437 Techniques of Middle/Secondary Education: Modern Language 2 TED 448 Techniques of Elementary Education: Modern Language 2

### Spanish Option-Liberal Arts

Required Courses: 19 cr. hrs. SPAN 102 Beginning Spanish II 4 SPAN 201 Intermediate Spanish I 3 SPAN 202 Intermediate Spanish II 3 SPAN 301 Conversation and Composition I 3 SPAN 302 Conversation and Composition II 3 SPAN 401 Advanced Spanish Communication 3 Directed Electives: 15 cr. hrs. Select 6 credits from: SPAN 341 Spanish Civilization to 1800 3 SPAN 342 Spanish Civilization 1800 to Present 3 SPAN 345 Latin American Civilization to 1800 3 SPAN 346 Latin American Civilization 1800 to Present 3 MODL 376 Mexico: A Cultural Experience 3 Select 6 credits from: SPAN 351 Survey of Spanish Literature-Siglo de Oro 3 SPAN 352 Survey of Spanish Literature-Generation of 1898 to Present 3 SPAN 355 Survey of Latin American Literature-Conquest to Independence 3 SPAN 356 Survey of Latin American Literature-Independence to Present 3 Select 3 credits from: SPAN 452 Advanced Spanish Literature 3 SPAN 455 Advanced Latin American Literature 3 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: 6 cr. hrs.** SPAN 350 Spanish Phonetics 2

TED 437 Techniques of Middle/Secondary Education: Modern Language 2 TED 448 Techniques of Elementary Education: Modern Language 2

#### French Minor: 22 Total Credits

French Minor-Liberal Arts Required Courses: 19 cr. hrs. FREN 102 Beginning French II 4 FREN 201 Intermediate French I 3 FREN 202 Intermediate French II 3 FREN 301 Conversation and Composition I 3 FREN 302 Conversation and Composition II 3 FREN 401 Advanced French Communication 3 Directed Electives: 3 cr. hrs. Select 3 credits from: FREN 316 French Cinema 3 FREN 341 French Civilization 3 FREN 342 Modern French and Francophone Cultures 3 FREN 351 Survey of French Literature to 1800 3 FREN 352 Survey of French Literature 1800 to Present 3 MODL 379 Internship in Modern Language 2-3

### French Minor-Education Complete French Minor Liberal Arts program

(must include FREN 341 or 342) **Required couses not part of minor: 6 cr. hrs.** FREN 350 French Phonetics 2 TED 437 Techniques of Middle/Secondary Education: Modern Language 2 TED 448 Techniques of Elementary Education: Modern Language 2

#### German Minor: 22 Total Credits Required Courses: 19 cr. hrs.

GERM 102 Beginning German II 4 GERM 201 Intermediate German II 3 GERM 202 Intermediate German II 3 GERM 301 Conversation and Composition I 3 GERM 302 Conversation and Composition II 3 GERM 401 Advanced German Communication 3 **Directed Electives: 3 cr. hrs. Select 3 credits from:** GERM 275 Business German 3 GERM 315 German Classic and Modern Film 3 GERM 341 German Civilization 3 GERM 342 Modern German-speaking Cultures 3 GERM 351 Survey of German Literature to Classicism 3 GERM 352 Survey of German Literature from Classicism to Present 3

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: 6 cr. hrs.** GERM 350 German Phonetics 2 TED 437 Techniques of Middle/Secondary Education: Modern Language 2 TED 448 Techniques of Elementary Education: Modern Language 2

## Spanish Minor: 22 Total Credits

#### **Required Courses: 19 cr. hrs.** SPAN 102 Beginning Spanish II 4 SPAN 201 Intermediate Spanish I 3 SPAN 202 Intermediate Spanish II 3 SPAN 301 Conversation and Composition I 3 SPAN 302 Conversation and Composition II 3 Directed Electives: 3 cr. hrs. Select 3 credits from: SPAN 341 Spanish Civilization to 1800 3 SPAN 342 Spanish Civilization 1800 to Present 3 SPAN 345 Latin American Civilization to 1800 3 SPAN 346 Latin American Civilization 1800 to Present 3 SPAN 351 Survey of Spanish Literature-Siglo de Oro 3 SPAN 352 Survey of Spanish Literature-Generation of 1898 to Present 3 SPAN 355 Survey of Latin American Literature-Conquest to independence 3 SPAN 356 Survey of Latin American Literature-

Independence to Present 3 MODL 376 Mexico: A Cultural Experience 3 MODL 379 Internship in Modern Language 2-3 SPAN 401 Advanced Spanish Communication 3

#### 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: 6 cr. hrs. SPAN 350 Spanish Phonetics 2 TED 437 Techniques of Middle/Secondary Education: Modern Language 2 TED 448 Techniques of Elementary Education: Modern Language 2

## Music (MUS/MUSE/ MUSA)

## Department of Music College of Arts and Sciences

B46 Kleinpell Fine Arts Building (715) 425-3183 www.uwrf.edu/music

J. Michael Roy-Chair, Thomas Barnett, Carolyn Britton, 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.

## General Education Requirements

BA and BS Liberal Arts majors as listed. BS Education majors as listed.

## Music Education Major 69 Total Credits

**Requirements: 36 cr. hrs.** MUS 130 Music Theory and Ear Training I 4 cr. MUS 131 Music Theory and Ear Training II 4 cr. MUS 230 Music Theory and Ear Training III 4 cr. MUS 231 Music Theory and Ear Training IV 4 cr. MUS 234 Music History and Literature I (writing intensive) 4 cr. MUS 235 Music History and Literature II (writing intensive) 4 cr. MUS 240 Piano Proficiency - Examination: MUS 140 0 cr. (Class Piano) must be taken until 240 is passed; 140 and 240 credits are not counted toward music major. MUS 333 20th Century Music 3 cr. MUS 351 Music Education I 3 cr. MUS 352 Music Education II 3 cr. MUS 491 Senior Recital 0 cr. MUS 200+ Any Music Course 200 and above 3 cr. 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 cr. MUSA 327 Applied Voice (upper level)-Pianists may substitute 3 cr. of Applied Piano 325 (2 per semester) 6 cr. MUSE 108 Concert Choir (required each semester) MUS 102 Class Guitar 1 cr. MUS 247 Diction I: IPA and Italian 1 cr. MUS 248 Diction II: German and French 1 cr. MUS 341 Vocal and Choral Pedagogy 3 cr. MUS 342 Conducting 2 cr. MUS 344 Choral Conducting 2 cr. MUS 331 Choral Composition and Arranging 3 cr. MUS 433 Choral Literature 3 cr. MUS 340 Opera Techniques 3 cr. **Required Courses for Instrumental/General** Certification: 33 cr. hrs. MUSA 100 level Applied-credits must be in the same area (2 per semester) 8 cr. MUSA 300 level Applied-upper leve-credits must be in the same area (2 per semester) 6 cr. MUSE 111 University-Community Orchestra or MUSE 113 Wind Ensemble (large ensemble required each semester) MUS 102 Class Guitar 1 cr. MUS 103 Class Voice 1 cr.

MUS 141 String Techniques 1 cr.

MUS 241 Woodwind Techniques I 1 cr.

MUS 242 Woodwind Techniques II 1 cr.

MUS 243 Brass Techniques I 1 cr.

MUS 244 Brass Techniques II 1 cr.

MUS 245 Percussion Techniques I 1 cr.

MUS 246 Percussion Techniques II 1 cr.

MUS 342 Conducting 2 cr.

MUS 343 Instrumental Conducting 2 cr.

MUS 330 Orchestration 3 cr.

MUS 431 Instrumental Literature 3 cr.

### Required for Teacher Certification: 29 cr. hrs.

(not counted in major total)
Choral/General or Instrumental/General (courses to be taken in the College of Education)
TED 120 Introduction to Education and Instructional
Technology 3 cr.
TED 212 Educational Psychology: Middle and Secondary
Education 5 cr.
TED 420 School and Society 3 cr.
TED 422 Content Area Literacy 3 cr.
PSYC 330 The Exceptional Child 3 cr.
TED 475 Student Teaching 12 cr.

# Music Major - Liberal Arts (minor required): 46 Total Credits

### Requirements: 35 cr. hrs.

MUS 130 Music Theory and Ear Training I 4 cr. MUS 131 Music Theory and Ear Training II 4 cr. MUS 230 Music Theory and Ear Training III 4 cr. MUS 231 Music Theory and Ear Training IV 4 cr. MUS 234 Music History and Literature I (writing intensive) 4 cr.

MUS 235 Music History and Literature II (writing intensive) 4 cr.

MUS 333 20th Century Music 3 cr.

MUSA 100 level Applied Music-credits must be in the same area. 4 cr.

MUSE Music Ensembles 4 cr.

Directed Electives: 11 cr. hrs.

MUSA or MUSE Performance credits (Applied Music or Ensembles) 4 - 6 cr.

Music Pedagogy, Techniques Course(s) or Academic Music course 200 level and above 4 - 6 cr.

# Music-Broad Area Major: 64 Total Credits Requirements: 36 cr. hrs.

MUS 130 Music Theory and Ear Training I 4 cr. MUS 131 Music Theory and Ear Training II 4 cr. MUS 230 Music Theory and Ear Training III 4 cr. MUS 231 Music Theory and Ear Training IV 4 cr. MUS 234 Music History and Literature I (writing intensive) 4 cr MUS 235 Music History and Literature II (writing intensive) 4 cr. MUS 240 Piano Proficiency - Examination: MUS 140 0 cr/ (Class Piano) must be taken until 240 is passed; 140 and 240 credits are not counted toward music major. MUS 333 20th Century Music 3 cr/ MUSA 100 level Applied credits must be in the same area (2 per semester) 8 cr/ MUSA 300 level Applied-upper level credits must be in the same area (2 per semester) 8 cr/ 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. MUSE Any Ensemble to total 4 cr. MUS 491 Senior Recital 1 cr. MUS 330 Orchestration or MUS 331 Choral Composition and Arranging 3 cr. MUS 200+ Any Music Courses 200 level and above 3 cr. MUS 200+ Any Music Courses 200 level and above 3 cr. MUS 200+ Any Music Courses 200 level and above 3 cr.

# Music Minor: 24 Total Credits

Required Courses: 16 cr. hrs.

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

### 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 theatre majors and minors.

## Musical Theatre Minor: 24 Total Credits Required Courses: 18 cr. hrs. MUS 103 Class Voice 1 cr. MUS 130 Music Theory and Ear Training I 4 cr.

MUS 131 Music Theory and Ear Training II 4 cr. MUS 225 Voice for the Actor 1 cr. SCTA 121 Acting I: Basic Techniques 3 cr. SCTA 225 Musical Theatre Performance 3 cr. SCTA 375 Theatre Practicum: Production 2 cr. **Directed Electives: 2 cr. hrs.** Select from the following: DANC 107 Social Dance .5 cr. DANC 110 Basic Jazz Dance .5 cr. DANC 120 Fundamentals of Movement through Dance 1 cr. DANC 150 Dance Improvisation 1 cr. DANC 224 Ballet I 1 cr. **Electives: 4 cr. hrs.** Select from the following: DANC 107 Social Dance .5 cr. DANC 110 Basic Jazz Dance .5 cr. DANC 224 Ballet I 1 cr. DANC 260 Dance Repertory 1-3 cr. SCTA 131 Design for the Theatre 3 cr. A maximum of 3 credits from the following 3 courses may be applied toward electives: SCTA 231 Stage Technology and Scene Painting 3 cr. or SCTA 332 Stage Costuming or SCTA 333 Stage Lighting SCTA 221 Acting II: Characterization 3 cr. SCTA 222 Voice and Articulation 3 cr. SCTA 288 Career Development: Theatre Arts 1 cr. SCTA 339 American Theatre 3 cr. MUSA 127 Applied Voice (a maximum of 2 may be applied toward electives) 1 cr. MUS 230 Music Theory and Ear Training III 4 cr. MUS 340 Opera Techniques 3 cr.

Students majoring in Music or Speech (any emphasis) may not double count any course when completing the Musical Theatre Minor.

Speech Communication and Theatre Arts and Music majors should consult with an adviser 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 www.uwrf.edu/hhp/

Chair–Faye Perkins, Debra Allyn, Jenn Berna, Richard Bowen, Martha Brennan, Kevin Bullis, Dean Culpepper, Gary Eloranta, Patti Ford, Steve Freeman, Bill Henderson, Cindy Hovet, Crystal Lanning, John O'Grady, Robert Ritzer, Jim Tangen-Foster, Sue Tarr, Karla Zhe

The mission of the Department of Health and Human Performance is to prepare quality teachers, coaches, fitness and recreation leaders who will enrich and support the wellbeing of others; help all individuals live healthy, satisfying, and energetic lives; and cultivate a commitment to physical activity and healthy lifestyle choices.

## Outdoor Education Minor - 24 Total

### Credits

## Required Courses: 13-16 cr. hrs.

PED 201 Outdoor Education Concepts and Skills-Summer 3 cr.

PED 202 Outdoor Education Concepts and Skills-Winter 3 cr.

PED 371 Recreation Field Study 1-4 cr. PED/ESM 301Foundation of Outdoor Leadership 3 cr. SFED 200 First Aid and Basic Life Support 2 cr.

### Electives 8-11 cr. hrs.

ESM 300 Environmental Education 3 cr. or GEOG 300 Environmental Education ESM 307 Multicultural Perspectives in the Environment 3 cr. ESM 365 Interpretive Services 3 cr. GEOL 269 Environmental Geology 2 cr. PED 109 Recreational Climbing 1 cr. PE 118 Scuba .5 cr. PE 128 Fundamentals of Ice Skating .5 cr. PED 145 Lifeguard Training 2 cr. PED 147 Water Safety Instructor 2 cr. PED 255 Techniques in Sport Fishing 1 cr. PED 300 Adapted Physical Education 2 cr. PED 389 Special Topics in Physical Education 3-5 cr. PED 450 Organization and Administration of Physical Education and Athletics 2 cr. POLS 355 Environmental Law 3 cr. SOCI 230 Sociology of Sport and Leisure 3 cr. TED 312 Techniques in Elementary Education: Science 4 cr.

# **Philosophy (PHIL)**

# Department of History and Philosophy College of Arts and Sciences

307 Kleinpell Fine Arts Building (715) 425-3164 www.uwrf.edu/history

History: Betty Bergland-Chair, Roark Atkinson, Victoria Houseman, Kurt Leichtle, Kiril Petkov and Zhiguo Yang.

Philosophy: Imtiaz Moosa, David Peters and Heather Wainwright

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.
PHIL 223 Origins of Modern Philosophy 3 cr.
PHIL 230 Logical Reasoning 3 cr.
Directed Electives: 15 cr. hrs.
Five additional PHIL courses

Updated March, 2007

# **Physics (PHYS)**

# Department of Physics College of Arts and Sciences

# 125 Centennial Science Hall (715) 425-3235 www.uwrf.edu/physics/

James Madsen-Chair, Earl Blodgett, Rellen Hardtke, Eileen Korenic, Lowell McCann, Glenn Spiczak, and Matthew Vonk General Education Requirements

Physics Major–Liberal Arts

## Physics 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. PHYS 102 General Physics Laboratory II 1 cr. PHYS 204 Intermediate Physics Laboratory 1 cr. PHYS 161 General Physics I 4 cr. PHYS 162 General Physics II 4 cr. PHYS 264 General Physics III 4 cr. PHYS 301 Advanced Physics Laboratory I (writing intensive) 3 cr. PHYS 302 Advanced Physics Laboratory II (writing intensive) 3 cr. PHYS 311 Electronics: Circuits and Devices 3 cr. PHYS 485 Seminar (writing intensive) 1 cr. **Required Supporting Courses: 20 cr. hrs.** MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. MATH 331 Differential Equations 3 cr. PHYS 211 Scientific Programming 3 cr. or CSIS 162 Programming II PHYS 361 Mathematics of Physics and Engineering I 3 cr. PHYS 362 Mathematics of Physics and Engineering II 3 cr.

## 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 25 cr. hrs.** Choose from courses below:

# Option II 36 Total Credits

Recommended for students wanting maximum flexibility for study in other areas **Physics Major Core 25 cr. hrs. Directed Electives in Physics 11 cr. hrs.** Choose from courses below:

### **Directed Electives in Physics**

PHYS 279 Cooperative Education and Internship 1 cr.
PHYS 312 Electronics: Linear Integrated Circuits 3 cr.
or PHYS 313 Electronics: Digital Circuit Theory and Applications
PHYS 318 Astrophysics 3 cr.
PHYS 321 Physical Acoustics I 2 cr.
PHYS 322 Physical Acoustics II 2 cr.
PHYS 379 Cooperative Education and Internship 3 cr.
PHYS 415 Thermodynamics 3 cr.
PHYS 420 Optics 4 cr.
PHYS 426 Nuclear and Particle Physics 4 cr.
PHYS 427 Condensed Matter Physics 4 cr.
PHYS 441 Classical Mechanics 4 cr.
PHYS 442 Electricity and Magnetism 4 cr.
PHYS 465 Quantum Mechanics 3 cr.

## Applied Option 49-50 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.** 

Required Courses in Physics 21 cr. hrs. PHYS 250 Statics 3 cr. PHYS 252 Dynamics 3 cr. PHYS 254 Deformable Body Mechanics 3 cr. PHYS 312 Electronics: Linear Integrated Circuits 3 cr. PHYS 313 Electronics: Digital Circuit Theory and Applications 3 cr. PHYS 361 Mathematics of Physics and Engineering I 3 cr. PHYS 362 Mathematics of Physics and Engineering II 3 cr. Directed Electives 3-4 cr. hrs. Choose an internship 3 cr. or advanced courses of an applied nature elected from

or advanced courses of an applied nature elected from Physics, Chemistry, or Geology.

## Physics Major-Secondary Education - 36

Total Credits Core Requirements: 25 cr. hrs. Required Course: 3 cr. hrs. PHYS 331 Curriculum Physics 3 cr. Directed Electives in Physics 8 cr. hrs. As listed for Liberal Arts excluding PHYS 279 and 379 Internship course

# Physics Major-Dual Degree

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.

## General Education

As listed for Liberal Arts excluding PHYS 279 and 379 Internship courses

# Required Courses in Physics at UW-River Falls: 10 cr. hrs.

PHYS 101 General Physics Laboratory I (meets Gen Ed req) 1 cr.

PHYS 102 General Physics Laboratory II 1 cr. PHYS 161 General Physics I (meets Gen Ed req) 4 cr.

## PHYS 162 General Physics II 4 cr.

Directed Electives: 20 cr. hrs. PHYS 250 Statics 3 cr. PHYS 252 Dynamics 3 cr. PHYS 254 Deformable Body Mechanics 3 cr. PHYS 264 General Physics III 4 cr. PHYS 301 Advanced Physics Laboratory I 3 cr. PHYS 311 Electronics: Circuits and Devices 3 cr. PHYS 361 Mathematics of Physics and Engineering I 3 cr. PHYS 362 Mathematics of Physics and Engineering II 3 cr. MATH 326 Applied Statistics 3 cr. MATH 346 Numerical Analysis I 3 cr. Credits Transferred from Engineering School 20 cr. hrs. Required Supporting Courses: 30 cr. hrs. MATH 166 Calculus I (meets Gen Ed reg) 4 cr. MATH 167 Calculus II 4 cr. MATH 256 Linear Algebra 3 cr. MATH 266 Calculus III 3 cr. MATH 331 Differential Equations 3 cr. PHYS 211 Scientific Programming 3 cr. CHEM 121 General Chemistry I 5 cr. CHEM 122 General Chemistry II 5 cr.

# Minor in Physics–Liberal Arts or Education

- 24 Total Credits

Required Courses 14 cr. hrs. PHYS 101 General Physics Laboratory I 1 cr. PHYS 102 General Physics Laboratory II 1 cr. PHYS 161 General Physics I 4 cr. PHYS 162 General Physics II 4 cr. PHYS 264 General Physics III 4 cr. Directed Electives for Both Minors: 10 cr. hrs. PHYS 204 Intermediate Physics Laboratory (writing intensive) 1 cr. PHYS 301 Advanced Physics Laboratory I (writing intensive) 3 cr. PHYS 302 Advanced Physics Laboratory II (writing intensive) 3 cr. PHYS 311 Electronics: Circuits and Devices 3 cr. PHYS 312 Electronics: Linear Integrated Circuits 3 cr. or PHYS 313 Electronics: Digital Circuit Theory and Applications PHYS 318 Astrophysics 3 cr. PHYS 321 Physical Acoustics I 2 cr. PHYS 322 Physical Acoustics II 2 cr. PHYS 415 Thermodynamics 3 cr. PHYS 420 Optics 4 cr. PHYS 426 Nuclear and Particle Physics 4 cr. PHYS 427 Condensed Matter Physics 4 cr.

PHYS 441 Classical Mechanics 4 cr.
PHYS 442 Electricity and Magnetism 4 cr.
PHYS 465 Quantum Mechanics 3 cr.
Additional Choice for Directed Elective for Secondary
Education Minor:
PHYS 331 Curriculum Physics 3 cr.
Required Supporting Courses 11 cr. hrs.
(may be taken under Gen Ed or under Major)
MATH 166 Calculus I 4 cr.
MATH 167 Calculus II 4 cr.
PHYS 361 Mathematics of Physics and Engineering I 3 cr. or MATH 266 Calculus III

## Pre-Engineering - 68 Total Credits Required Courses: 55 cr. hrs.

PHYS 101 General Physics Laboratory I 1 cr. PHYS 102 General Physics Laboratory II 1 cr. PHYS 161 General Physics I 4 cr. PHYS 162 General Physics II 4 cr. PHYS 211 Scientific Programming 3 cr. CHEM 121 General Chemistry I 5 cr. CHEM 122 General Chemistry II 5 cr. MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. MATH 256 Linear Algebra 3 cr. MATH 266 Calculus III 3 cr. MATH 331 Differential Equations 3 cr. ENGL 111 Freshman English I 3 cr. ENGL 112 Freshman English II 3 cr. ECON 201 Principles of Microeconomics 3 cr. ECON 202 Principles of Macroeconomics 3 cr. SCTA 101 Fundamentals of Oral Communication 3 cr. Electives depending on final engineering major: 13 cr. hrs.

Select from MATH, PHYS, CSIS, CHEM, GENG, BIOL, GEOL

Updated February, 2007

# Political Science (POLS)

# Department of Political Science College of Arts and Sciences

# 356 Kleinpell Fine Arts Building (715) 425-3318/3798 www.uwrf.edu/pols/

Tracey Gladstone-Sovell-Chair, Davida Alperin, Wesley Chapin, Neil Kraus.

The political science department,s requirements for a major or minor are designed to provide students with the intellectual skills and substantive knowledge that are necessary to be able to analyze and interpret political events and governmental processes.

Information for students interested in pre-law is listed on ?? of the printed catalog.

### **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.

BA and BS Liberal Arts majors. BS Education majors.

## Political Science Major

### Political Science Major: 36 Total Credits Required Courses: 9 cr. hrs.

POLS 114 American National, State and Local Government 3 cr. POLS 200 Political Analysis 3 cr. POLS 480 Seminar in Political Science 3 cr.

### 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 253 State and Local Politics POLS 256 Public Policymaking POLS 311 American Political Parties and Elections POLS 322 Politics of American Cities POLS 326 The American Presidency: The Office and its Powers POLS 327 Congressional Politics 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 3 cr. hrs.

POLS 230 Contemporary Political Ideologies POLS 308 Western Political Thought: The Renaissance through Marx POLS 309 Western Political Thought: Nietzsche to the Present 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 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.

### **Required Supporting Course:**

# Political Science Majors must take ONE of the following courses:

PSYC 210 Behavioral Statistics; SOCI 250 Introduction to Social Statistics; ECON 226 Introduction to Statistics; MATH 216 Elementary Statistical Concepts; or MATH 226 Fundamentals of Statistics.

## Political Science Minor

### Political Science Minor 24 Total Credits Required Courses: 3 cr. hrs.

POLS 114 American National, State and Local Government 3

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 253 State and Local Politics POLS 256 Public Policymaking POLS 311 American Political Parties and Elections POLS 322 Politics of American Cities POLS 326 The American Presidency: The Office and its Powers POLS 327 Congressional Politics

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 3 cr. hrs.

POLS 230 Contemporary Political Ideologies POLS 308 Western Political Thought: The Renaissance through Marx POLS 309 Western Political Thought: Nietzsche to the Present 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 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 credits 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.

Updated May, 2007

# Professional and Organizational Communication

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

# B24 Kleinpell Fine Arts Building (715) 425-3971

Robin Murray-Chair, Suzanne Hagen, Gorden Hedahl, Evan Johnson, James Pratt, Kenneth Stofferahn, Margaret M. Swanson, Barbara L. Werner, Jennifer Willis-Rivera, James Zimmerman

Adjuncts: Denise Baker, Eric Eberhardt, Pat Hanson, Kathleen Olsen, Jeanne St. Claire, Linda Short, Angela Siwik

### **SPECIAL NOTE:**

Department name and program changes are pending approval and expected for Fall 2007.

## Professional and Organizational

Communication Minor - 24 Total Credits Required Courses 15 cr. hrs. SCTA 207 Listening Skills 3 cr. SCTA 208 Problem Solving in Small Group Communication 3 cr. SCTA 216 Communication in the Interview 3 cr. SCTA 316 Organizational Communication 3 cr. Choose any combination from the following two to total 3 credits: SCTA 379 Internship in SCTA 3-4 cr. SCTA 499 Independent Study/Independent Research 1-3 cr. **Directed Electives 9 cr. hrs.** SCTA 106 Interpersonal Communication 3 cr. SCTA 111 Argumentation and Decision Making 3 cr. SCTA 306 Nonverbal Communication 3 cr. SCTA 311 Persuasion 3 cr. SCTA 313 Intercultural Communication 3 cr. SCTA 318 Communication and Leadership 3 cr. SCTA 360 Corporate Electronic Communication 3 cr. SCTA 416 Communication Training and Development in Organizations 3 cr. SCTA 440 Gender Communication 3 cr.

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.

Updated April, 2007

# **Professional Writing** Department of English

# College of Arts and Sciences

# 245 Kleinpell Fine Arts Building (715) 425-3537 www.uwrf.edu/english/

Laura Zlogar-Chair, Jennifer Brantley, David Furniss, Greta Gaard, Larry Harred, Mialisa Hubbard Kathleen Hunzer, Nicholas Karolides, Annette Klemp, Steven Luebke, Richard McNamara, James Mulvey, Ronald Neuhaus, Michelle Parkinson, Vladimir Pavlov, Elizabeth Schneider-Rebozo, Robyne Tiedeman, Marshall Toman, Ruth Wood

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 Minor

# Business Government Option 23-24 Total Credits

Required Courses: 5-9 cr. hrs.

ENGL 251 Advanced Composition 3 cr. ENGL 266 Business Writing 3 cr. ENGL 367 Technical Writing 3 cr. English Majors may not double count ENGL 251, but must take an additional appropriate course selected from ENGL 361, 370, 373, JOUR 269, 360, 363, MARC 361 or SCTA 334.

## Directed electives: 14-15 cr. hrs.

A. Select two: 5-6 cr. hrs.

ART 225 Advertising Design I 3 cr.

ART 235 Introduction to Black and White Photography 3 cr. ART 303 Advertising Design II 3 cr.

ART 335 Studio - Photography 3 cr.

JOUR 260 Introduction to Public Relations 2 cr.

JOUR 266 Photojournalism 3 cr.

JOUR 269 Feature Writing for Magazines and Newspapers

2 cr.

JOUR 320 Journalism and Public Opinion 3 cr.

JOUR 360 Opinion Writing 3 cr. JOUR 362 Advertising Principles 2 cr. CSIS 105 Microcomputer Applications 2 cr. ENGL 379 Internship 2-3 cr. **B.** Select two: 6 cr. hrs. ENGL 320 Structure of English 3 cr. ENGL 372 Practicum: Peer Tutoring and Writing Instruction 3 cr. ENGL 482 Writing Seminar in Fiction and Poetry 3 cr. SCTA 116 Business and Professional Communication 3 cr. SCTA 211 Public Speaking 3 cr. SCTA 216 Communication in the Interview 3 cr. SCTA 311 Persuasion 3 cr. SCTA 316 Organizational Comm 3 cr.

C. Select one additional course from any of the above. 3 cr.

## Professional Writing-Creative Writing Option 24 Total Credits Required Courses: 12 cr. hrs.

ENGL 251 Advanced Composition 3 or

ENGL 251 Advanced Composition 3 cr, ENGL 253 Introduction to Literary Studies 3 cr. ENGL 262 Creative Writing 3 cr. ENGL 482 Writing Seminar in Fiction and Poetry 3 cr. English Majors may not double count ENGL 251, but must take an additional appropriate course selected from ENGL 361, 370, 373, JOUR 269, 360, 363, or MARC 361, or SCTA 334; for ENGL 253, select another genre course.

## Directed electives: 12 cr. hrs.

A. Select two: 6 cr. hrs. ENGL 368 Writing Poetry 3 cr. ENGL 369 Writing Fiction 3 cr. ENGL 370 Writing Nonfiction 3 cr. SCTA 334 Playwriting 3 cr. B. Select one genre course: 3 cr. hrs. ENGL 231 The Short Story 3 cr. ENGL 232 Contemporary Drama 3 cr. ENGL 233 Introduction to Poetry 3 cr. ENGL 234 Modern Novels 3 cr. ENGL 250 Children's Literature 3 cr. ENGL 355 Literature for Adolescents 3 cr. C. Select one: 3 cr. hrs. ART 235 Introduction to Black and White Photography 3 cr. ART 335 Studio - Photography 3 cr. JOUR 245 Writing for Film and Television 3 cr. JOUR 266 Photojournalism 3 cr. JOUR 269 Feature Writing for Magazines and Newspapers 2 cr. JOUR 360 Opinion Writing 3 cr. SCTA 223 Oral Interpretation of Literature 3 cr. SCTA 151 Broadcast Performance I 3 cr. SCTA 334 Playwriting 3 cr.

SCTA 351 Broadcast Performance II 3 cr.

Updated 02/08/2007

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

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

Michael Reich–Chair, Bradley Caskey, Lisa Isenberg, Cynthia Kernahan, Daniel Linwick, Barbara Rebhuhn, 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 in the printed catalog. General Education Requirements

As listed 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: 18 cr. hrs.

PSYC 101 General Psychology 3 cr. (credits can be counted in general education) PSYC 201 Behavioral Statistics 3 cr/ (credits can be counted in general education) PSYC 205 Research Methods (writing intensive) 3 cr. PSYC 265 Social Psychology 3 cr. PSYC 305 Learning and Motivation 3 cr. PSYC 315 Psychological Measurement and Evaluation 3 cr. PSYC 355 Physiological Psychology 3 cr. PSYC 401 History and Systems of Psychology 3 cr. Required Courses: 9 cr. hrs. Choose one of the following two courses: PSYC 236 Developmental Psychology: Childhood and Adolescence 3 cr. PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. Choose one of the following two courses: PSYC 310 Memory and Thinking 3 cr. PSYC 350 Sensation and Perception 3 cr.

Choose one of the following two courses: PSYC 320 Psychology of Personality 3 cr. PSYC 325 Abnormal Psychology 3 cr.

### Directed Electives: 36 cr. hrs.

Additional courses in Psychology. All psychology majors are required to participate in the departmental assessment of the psychology major. This involves keeping a portfolio and taking a psychology assessment test in their first and last year in the program.

Students seeking a Broad Field Social Studies (BFSS) degree with a concentration in psychology should see department chair for current major requirements.

## Psychology Minor - 24 Total Credits Required Courses: 9 cr. hrs.

PSYC 101 General Psychology 3 cr. (credits can be counted in general education) PSYC 201 Behavioral Statistics 3 cr. (credits can be counted in general education) PSYC 205 Research Methods(writing intensive) 3 cr. or PSYC 315 Psychological Measurement and Evaluation **Electives: 24 cr. hrs.** 

Additional courses in Psychology Sociology majors with a minor in psychology who have taken SOCI 300, Research Methods, may substitute another psychology course for the PSYC 205 or PSYC 315 requirement.

Updated 10/24/2006

# Science, Broad Field Interdisciplinary Program

# 104 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)

Broad Field Sciences Programs are monitored by 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 at www.uwrf. edu/college-of-education/ for the detailed requirements for various levels of certification in Wisconsin General Education Requirements

Arts and Sciences as listed on pages 22-23; and Education and Professional Studies as listed. Up to two of these courses may be double counted in the General Education program, depending on your specific course of study.

# Broad Field Science Major - Liberal Arts: 60 Total Credits

Required Courses: 42 cr. hrs. BIOL 150 General Biology 3 cr. BIOL 210 General Botany 3 cr. BIOL 230 General Zoology 3 cr. CHEM 121 General Chemistry I 5 cr. CHEM 122 General Chemistry II 5 cr. GEOL 101 Introductory Geology 3 cr. GEOL 102 Introductory Geology Lab 1 cr. GEOL 150 Historical Geology 4 cr. GEOL 202 Oceanography 3 cr. ISCI 497 Interdisciplinary Capstone in Science 2 cr. Choose either sequence A or B below: A. PHYS 151 General Physics I 4 cr. PHYS 152 General Physics II 4 cr. PHYS 156 General Physics Laboratory I 1 cr. PHYS 157 General Physics Laboratory II 1 cr. **B.** PHYS 101 General Physics Laboratory I 1 cr. PHYS 102 General Physics Laboratory II 1 cr. PHYS 161 General Physics I 4 cr. PHYS 162 General Physics II 4 cr.

**Directed Electives: (complete concentrations in two** areas) 13-15 cr. hrs. Biology: 6 cr. hrs. BIOL 240 Cell Biology 3 cr. BIOL 310 Identification of Plants 3 cr. Chemistry: 7 cr. hrs. CHEM 230 General Organic Chemistry or CHEM 231 Organic Chemistry I 3 cr. CHEM 236 Organic Chemistry Lab I 1 cr. CHEM 251 Analytical Chemistry 2 cr. CHEM 256 Analytical Chemistry Lab 1 cr. Geology: 8 cr. hrs. GEOL 230 Mineralogy 4 cr. GEOL 327 Geomorphology and Glacial Geology (writing intensive) 4 cr. Physics: 7 cr. hrs. PHYS 264 General Physics III 4 cr. PHYS 300 level or higher, excluding 361 and 362 3 cr. Electives: 3-5 cr. hrs. Select from BIOL, CHEM, GEOL, PHYS

# Broad Field Science Major–Education: Broad Science Certification- 63 Total Credits

A person with a broad field science license may teach any science class, middle-school level through grade 10, and any basic science class in grades 11-12 which is not a collegepreparatory course, advanced placement (AP) course, or an elective course with more depth of content than a basic course. However, you may teach advanced courses in your areas of concentration.

### Requirements as listed for the Broad Field Science Major-Liberal Arts 60 cr. hrs.

Plus ESM 300 Environmental Education 3 cr. or GEOG 300 Environmental Education

# Broad Field Science Major–Education: Physical Science Certification - 63 Total Credits

This program leads to certification for chemistry, physics and physical science, for both basic and advanced courses at the secondary school level.

### **Requirements:**

CHEM 121 General Chemistry 5 cr. CHEM 122 General Chemistry 5 cr. CHEM 230 General Organic Chemistry 3 cr. or CHEM 231 Organic Chemistry I CHEM 236 Organic Chemistry Lab I 1 cr. CHEM 251 Analytical Chemistry 2 cr. CHEM 256 Analytical Chemistry Lab 1 cr. PHYS 101 General Physics Laboratory I 1 cr. PHYS 102 General Physics Laboratory II 1 cr. PHYS 161 General Physics I 4 cr. PHYS 264 General Physics III 4 cr. PHYS 311 Electronics: Circuits and Devices 3 cr. PHYS 331 Curriculum Physics 3 cr. MATH 166 Calculus I 4 cr. MATH 167 Calculus II 4 cr. ESM 300 Environmental Education 3 cr. or GEOG 300 Environmental Education ISCI 497 Interdisciplinary Capstone in Science 2 cr. Directed Electives 13 cr. hrs. Chemistry-Choose from: 6-7 cr. hrs. CHEM 232 Organic Chemistry II 4 cr. CHEM 237 Organic Chemistry Lab II 1 cr. CHEM 311 Polymer Chemistry 3 cr. CHEM 340 Physical Chemistry of Biological Systems 3 cr. CHEM 341 Chemical Thermodynamics and Kinetics 3 cr. CHEM 342 Molecular Structure of Spectroscopy 3 cr. CHEM 355 Separate Science Lab 1 cr. CHEM 356 Chemical Instrumentation Lab 1 cr. CHEM 361 Biochemistry I 3 cr. CHEM 411 Polymer Science 3 cr. CHEM 416 Polymer Lab 1 cr. CHEM 422 Advanced Inorganic Chemistry 3 cr. CHEM 461 Pharmacology 3 cr. Physics-Choose from: 3-4 cr. hrs. PHYS 300 level or higher, excluding 361 and 362 3 cr. Math-Choose from: 3 cr. hrs. MATH 266 Calculus III 3 cr. or PHYS 361 Mathematics of Physics and Engineering

# Science, General Interdisciplinary Program

# 104 Centennial Science Hall (715) 425-3196 www.uwrf.edu/bfs/

Earl Blodgett–Coordinator General Science Minor for Elementary Science Teachers

Up to two of these courses may be double counted in the General Education program, depending on your specific course of study. When planning your course selection, be sure to consider the prerequisites for upper level courses. Higher level courses may be substitute on a case-by-case basis; contact the coordinator.

General Science Minor 30 Total Credits Select 12 credits from one area and 6 credits from each of the remaining three areas: Biology 6-12 cr. hrs. BIOL 150 General Biology 3 cr. BIOL 210 General Botany 3 cr. BIOL 230 General Zoology 3 cr. BIOL 253 Human Biology 3 cr. Chemistry 6-12 cr. hrs. CHEM 101 Elementary Principles of Chemistry 3 cr. CHEM 200 Chemistry and the Environment 3 cr. CHEM 220 Chemistry of Life 3 cr. CHEM 230 General Organic Chemistry 3 cr. Geology 6-12 cr. hrs. GEOL 101 Introductory Geology 3 cr. GEOL 102 Introductory Geology Lab 1 cr. GEOL 150 Historical Geology 4 cr. GEOL 202 Oceanography 3 cr. GEOL 269 Environmental Geology 2 cr. GEOL 305 Geology of the Planets 2 cr. GEOL 330 Meteorology 2 cr. Physics 6-12 cr. hrs. PHYS 114 Basic Physics 3 cr. PHYS 117 Introductory Astronomy 3 cr. PHYS 220 The Science of Light 4 cr. PHYS 318 Astrophysics 3 cr. PHYS 321 The Science of Sound 2 cr.

# Secondary Education (TED)

# Department of Teacher Education College of Education and Professional Studies

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

Teri Crotty-Chair, Tim Holleran, Angela Kaiser, Teresa Kruizenga, Michael Miller, Florence Monsour, David Pepi, Margaret Phinney, Geoffrey Scheurman, José E. Vega, Gay Ward

The degree curricula designed to prepare teachers for the secondary school, in either Early Adolescence - Adolescence (formerly grades 6-12) or Early Childhood - Adolescence (formerly K-12), The program 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.

Coursework included in the professional sequence, major, minor or concentration may not be included in the general education component.

# 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

Early Adolescence - Adolescence Programs, teaching ages 11-21 years.

### **Comprehensive Majors:**

Broad Area/Physical Science Broad Area Science Broad Area Social Studies Broad Area English Majors: Biology Chemistry Communicative Disorders - does not lead to licensing at the undergraduate level Earth Science English Mathematics Physics Speech

### Minors:

Anthropology-1 Athletic Coaching Biology Chemistry Dance Earth Science-2 Economics-1 English French - with an EA-A major Geography-1 German - with an EA-A major Health Education History-1 Mathematics Physics Political Science-1 Spanish - with an EA-A major Speech Sociology-1 TESOL - with an EA-A major

# Early Childhood - Adolescence Programs, teaching a variety of ages in school settings

### **Compressive Majors**

Art Music (choral or Instrumental options) Physical Education Agricultural Education

### Majors

Teaching English as a Second Language (TESOL) Modern Language (French, German, and Spanish options) Health Education.

### Minors

Teaching English as a Second Language (TESOL) only with an EC-A Modern Language major French - only with an EC-A Modern Language or TESOL

- French only with an EC-A Modern Language or TESOL major.
- German only with an EC-A Modern Language or TESOL major.
- Spanish only with an EC-A Modern Language or TESOL major.

Athletic Coaching - only with a Physical Education Major

Adaptive Physical Education - requires a major in Health and Human Performance (K-12) education. 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.

Updated May, 2007

# Social Science Interdisciplinary

# 304 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.

Broad Field Social Studies Minor - 30 cr. hrs.

## For Elementary Education Majors only

BFSS 200 3 cr. HIST 102 3 cr. HIST U.S. (at or above 200 level) 6 cr. GEOG 110 3 cr. GEOG 120 (at or above 200 level) 3 cr. POLS (at or above 200 level) 3 cr. PSYC (at or above 200 level) 3 cr. ECON (at or above 200 level) 3 cr. Sociology/Anthropology (at or above 200 level) 3 cr.

Updated March, 2007

# Social Studies, Broad Field

# Department of History and Philosophy College of Arts and Sciences

304 Kleinpell Fine Arts (715) 425-3164

Kurt E. Leichtle-Coordinator

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.

## General Education Requirements

Social and Behavioral Science: BS Education majors as listed.

# Professional Secondary Education Requirements 37 Total Credits

Major Requirements 36-39 cr. hrs. Meet the major requirements in one of the social sciences: Economics, Geography, History, Political Science, Psychology, or Sociology Directed Electives: 30 cr. hrs. **History Directed Electives Core:** A. BFSS 200 3 cr. **B.** ESM/GEOG 300 3 cr. **C.** BFSS 400 4 cr. Distribution: 20-21 cr. at 200, 300, and/or 400 level A. 3 cr. in each area (total of 15 credits) Sociology/Anthropology 3 cr. Political Science 3 cr. Economics 3 cr. Geography 3 cr. Psychology 3 cr. **B.** 3 additional credits in two of the above areas **Supporting Courses:** TED 433 3 cr. Non-History Directed Electives Core: 30 cr. hrs. A. BFSS 200 3 cr. **B.** ESM/GEOG 300 3 cr. **C.** BFSS 400 4 cr. Distribution: 20-21 cr. hrs. **A.** History HIST 100, 215, or 216 3 cr. HIST 101 or 102 3 cr.

B. 3 cr. in each area outside of emphasis (total of 12 credits)
Psychology
Political Science
Geography
Economics
Sociology/Anthropology
C. 3 additional credits in one of the above areas

See also Broad Field Social Studies Minor for Elementary Education Majors only

Updated March 2007

# Social Work (SOWK)

# College of Education and Professional Studies

203 Wyman Education Buildilng (715) 425-3655 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 with the following exceptions: Social and Behavioral: 8-9 cr. hrs. ECON 100, POLS 114, PSYC 101 required as supporting courses. Sciences: 8-9 cr. hrs. BIOL 100 required as supporting course. Mathematics: 3 cr. hrs. PSYC 201 or MATH 226 required as supporting course.

Liberal Arts, follows BS Liberal Arts Degre: 10-12 cr. hrs. BIOL 253 required as a supporting course.

## Social Work Major - 123 Total Credits Required Courses: 54 cr. hrs.

SOWK 150 Introduction to Social Work Services 3 cr. SOWK 205 Introduction to Social Work and Social Welfare 3 cr. SOWK 215 Human Behavior and Social Environment 3 cr. SOWK 250 Use, Abuse, and Addiction 3 cr. SOWK 300 Research Methods 3 cr. SOWK 324 Theory and Practice of Social Work I 3 cr. SOWK 325 Theory and Practice of Social Work II 3 cr. SOWK 350 Social Welfare Policy 3 cr. SOWK 389 Special Topics in Social Work (2) 6 cr. SOWK 424 Advanced Interviewing and Crisis Intervention 3 cr. SOWK 426 Theory and Practice Of Social Work III 3 cr. SOWK 472 Social Work Field Instruction (2) 12 cr. SOWK 480 Senior Integrative Seminar 3 cr. SOWK 481 Integrating Practice and Research 3 cr. **Required Supporting Courses: 8 cr. hrs.** SOWK 100 Introduction to Sociology 3 cr. CSIS 105 Microcomputer Applications 2 cr. SOWK 260 Practice with Diverse Populations 3 cr. **Directed Electives: 3 cr. hrs.** SOCI 218 Deviant Behavior 3 cr. SOCI 221 Global Perspectives on Women 3 cr.

SOCI 315 Sociology of Later Life 3 cr. SOCI 323 Sociology of the Family 3 cr. SOCI 330 Social Organizations 3 cr. SOCI 338 Global Prespectives on Health and Disease 3 cr. SOCI 435 Social and Cultural Change 3 cr. SOCI 445 Power and Inequality 3 cr. CJ 202 Introduction to Criminal Justice 3 cr. CJ 320 Juvenile Delinquency 3 cr. CJ 322 Criminology 3 cr. CJ 430 Trends and Issues in Incarceration 3 cr. SCTA 206 Family Communication 3 cr. SCTA 207 Listening Skills 3 cr. SCTA 208 Problem Solving in Small Group Communication 3 cr. SCTA 318 Communication and Leadership 3 cr. PSYC 236 Developmental Psychology: childhood and Adolescence 3 cr. PSYC 330 The Exceptional Child 3 cr. PSYC 336 Developmental Psychology: Adulthood and Aging 3 cr. PSYC 365 Individual and Group Processes 3 cr. PSYC 420 Introduction to Learning Disabilities 3 cr. PSYC 421 Mental Retardation 3 cr. POLS 225 Introduction to Public Administration 3 cr. POLS 253 State and Local Politics 3 cr. POLS 256 Public Policymaking 3 cr. HIST 310 History of American Political Thought 3 cr. WMST 200 Introduction to Women's Studies 3 cr.

INTS 200 Introduction to International Studies 3 cr.

# **Sociology (SOCI)**

# Department of Sociology, Anthropology, and Criminal Justice

College of Arts and Sciences

## 326 Kleinpell Fine Arts Building (715) 425-3992 www.uwrf.edu/sociology/

Edward Robins–Chair, Brian Copp, Tricia Davis, Jean Hector Faley, Clifford Mottaz, Timothy E. Nissen, 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
- 6. Minor in Criminal Justice (Non-Sociology Major).

## General Education Requirements:

BA and BS Liberal Arts majors as listed. BS Education majors as listed. 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. SOCI 208 Sociology of Diversity 3 cr. or SOCI 225 Sociology of Race and Ethnicity or ANTH 225 Sociology of Race and Ethnicity SOCI 250 Social Statistics 3 cr. SOCI 300 Research Methods 3 cr. SOCI 400 Social and Cultural Theory 3 cr. SOCI 480 Senior Seminar 3 cr. 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. or ANTH 205 Culture and Personality SOCI 211 Global Perspectives on Children 3 cr. or ANTH 211 Global Perspectives on Children SOCI 218 Deviant Behavior 3 cr. SOCI 221 Global Perspectives on Women 3 cr. or ANTH 221 Global Perspectives on Women

SOCI 227 Religious Groups and Cults 3 cr. SOCI 228 Native American Cultures 3 cr. or ANTH 228 Native American Cultures SOCI 230 Sociology of Sport and Leisure 3 cr. SOCI 240 Social Problems 3 cr. SOCI 245 Environmental Sociology 3 cr. SOCI 247 Human and Cultural Origins 3 cr. or ANTH 247 Human and Cultural Origins SOCI 310 Sociology through Film 3 cr. SOCI 315 Sociology of Later Life 3 cr. SOCI 323 Sociology of the Family 3 cr. SOCI 326 Sociology of Gender Roles 3 cr. SOCI 330 Social Organization 3 cr. SOCI 338 Global Perspectives on Health and Disease 3 cr. or ANTH 338 Global Perspectives on Health and Disease SOCI 340 Sociology of Rural Life 3 cr. SOCI 345 Sociology of Urban Life 3 cr. SOCI 348 Faces of Culture 3 cr. or ANTH 348 Faces of Culture SOCI 378 Semester Abroad Research 3-6 cr. SOCI 389 Special Topics in Sociology 2-3 cr. or ANTH 389 Special Topics in Anthropology SOCI 410 Social Psychology 3 cr. SOCI 435 Social and Cultural Change 3 cr. or ANTH 435 Social and Cultural Change SOCI 445 Power and Inequality 3 cr. SOCI 490 Readings in Sociology 1-2 cr. or ANTH 490 Readings in Anthropology or SOCI 499 Independent Study cr. or ANTH 499 Independent Study

# Sociology Minor - Liberal Arts or

Education: 24 Total Credits

## Required Courses: 9 cr. hrs.

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

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

# 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 www.uwrf.edu/scta

Robin Murray-Chair, Suzanne Hagen, Gorden Hedahl, Evan Johnson, James Pratt, Kenneth Stofferahn, Margaret M. Swanson, Barbara L. Werner, Jennifer Willis-Rivera, James Zimmerman

Adjuncts: Denise Baker, Eric Eberhardt, Pat Hanson, Kathleen Olsen, Jeanne St. Claire, Linda Short, Angela Siwik

## SPECIAL NOTE:

Department name and program changes are pending approval and expected for Fall 2007. General Education Requirements

Speech Communication Major - Liberal Arts, B.S.

# Speech Communication Emphasis 34 Total Credits

### **Required Courses: 16 cr. hrs.**

SCTA 106 Interpersonal Communication 3 cr. SCTA 207 Listening Skills 3 cr. SCTA 284 Sophomore Seminar: Foundations in Communication and Theatre Studies 3 cr. SCTA 306 Nonverbal Communication 3 cr. SCTA 311 Persuasion 3 cr. SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. Directed Electives: 18 cr. hrs. SCTA 111 Argumentation and Decision Making 3 cr. SCTA 206 Family Communication 3 cr. SCTA 208 Problem Solving in Small Group Communication 3 cr. SCTA 316 Organizational Communication SCTA 211 Public Speaking 3 cr. SCTA 313 Intercultural Communication 3 cr. SCTA 314 Introduction to Criticism for Oral Communication 3 cr. SCTA 319 Freedom to Speak 3 cr. SCTA 414 Speech in History 3 cr. SCTA 440 Gender Communication 3 cr. SCTA 370 Intercollegiate Debate 1 cr.

or SCTA 371 Intercollegiate Forensics 1cr. SCTA 379 Internship 3-12 cr. or SCTA 499 Independent Study/Independent Research 1-3 cr.

## 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. SCTA 207 Listening Skills 3 cr. SCTA 208 Problem Solving in Small Group Communication

3 cr. SCTA 216 Communication in the Interview 3cr. SCTA 284 Sophomore Seminar: Foundations in Communication and Theatre Studies SCTA 316 Organizational Communication 3 cr. SCTA 379 Internship 3-12 cr. and/or SCTA 499 Independent Study/Independent Research (1-3 cr.)SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. Directed Electives: 12 cr. hrs. SCTA 111 Argumentation and Decision Making 3 cr. SCTA 306 Nonverbal Communication 3 cr. SCTA 311 Persuasion 3 cr. SCTA 313 Intercultural Communication 3 cr. SCTA 318 Communication and Leadership 3 cr. SCTA 360 Corporate Electronic Communication 3 cr. SCTA 416 Communication Training and Development in Organizations 3 cr. SCTA 440 Gender Communication 3 cr. 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. SCTA 160 TV Studio Production 3 cr. SCTA 260 Electronic Field Production 3 cr. SCTA 261 Electronic Media Copy Writing 3 cr. SCTA 284 Sophomore Seminar: Foundations in Communication and Theatre Studies 3 cr. SCTA 310 Media Literacy - A Weapon Against Propaganda 3 cr. SCTA 360 Corporate Electronic Communication 3 cr. SCTA 377 Mass Communication Practicum 1 cr. SCTA 458 Broadcast Programming and Criticism 3 cr. SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. Directed Electives: 9 cr. hrs. Choose one from the following:

SCTA 353 Mass Media and Popular Culture 3 cr. SCTA 340 Gender, Race, Ethnicity and Class in Media 3 cr. **Choose one from the following:** 

SCTA 311 Persuasion 3 cr. JOUR 345 History of Mass Communication 3 cr. **Choose 3 cr. from the following:** SCTA 379 Internship in SCTA 3-12 cr. SCTA 200 Introduction to Film Studies 3 cr. SCTA 216 Communication in the Interview 3 cr. SCTA 222 Voice and Articulation 3 cr. SCTA 248 Film - Cultures in Conflict 3 cr. SCTA 301 Film History 3 cr. JOUR 319 The Media and American Politics 3 cr. JOUR 455 Mass Media and Society 3 cr. JOUR 465 Mass Communication Law 3 cr. SCTA 499 Independent Study/Independent Research 1-3 cr. Speech Communication Major - Liberal Arts B.A

## Speech Communication Major - Liberal

## Arts B.A. 34 Total Credits

### **Required Courses: 4 cr. hrs.**

SCTA 284 Sophomore Seminar: Foundations in Communication and Theatre Studies 3 cr. SCTA 484 Senior Portfolio Seminar in SCTA 1 cr.

### 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. SCTA 111 Argumentation and Decision Making 3 cr. SCTA 208 Problem Solving in Small Group Communication 3 cr.

SCTA 211 Public Speaking 3 cr.

or SCTA 311 Persuasion

SCTA 284 Sophomore Seminar: Foundations in

Communication and Theatre Studies 3 cr.

SCTA 306 Nonverbal Communication 3 cr.

SCTA 314 Introduction to Criticism for Oral Communication 3 cr.

SCTA 403 Directing the Secondary School Forensics Program 3 cr.

SCTA 407 Listening Instruction 3 cr.

SCTA 414 Speech in History 3 cr.

SCTA 484 Senior Portfolio Seminar in SCTA 1 cr. 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.

SCTA 208 Problem Solving in Small Group Communication 3 cr.

SCTA 211 Public Speaking 3 cr.

or SCTA 311 Persuasion

SCTA 306 Nonverbal Communication 3 cr.

SCTA 314 Introduction to Criticism for Oral Communication 3 cr.

SCTA 403 Directing the Secondary School Forensics Program 3 cr. SCTA 407 Listening Instruction 3 cr. SCTA 414 Speech in History 3 cr.

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. SCTA 306 Nonverbal Communication 3 cr.

SCTA 407 Listening Instruction 3 cr.

Directed Electives: 9 cr. hrs.

SCTA 208 Problem Solving in Small Group Communication 3 cr.

SCTA 327 Children's Theatre and Puppetry 3 cr. SCTA 328 Creative Dramatics for Children and Special Populations 3 cr.

SCTA 335 Directing I 3 cr.

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.

SCTA 207 Listening Skills 3 cr.

SCTA 306 Nonverbal Communication 3 cr.

SCTA 311 Persuasion 3 cr.

**Directed Electives: 12 cr. hrs.** 

SCTA 111 Argumentation and Decision Making 3 cr.

SCTA 206 Family Communication 3 cr.

SCTA 208 Problem Solving in Small Group Communication 3 cr.

or SCTA 316 Organizational Communication

SCTA 211 Public Speaking 3 cr.

SCTA 313 Intercultural Communication 3 cr.

SCTA 314 Introduction to Criticism for Oral Communication 3 cr.

SCTA 319 Freedom to Speak 3 cr.

SCTA 414 Speech in History 3 cr.

SCTA 440 Gender Communication 3 cr.

SCTA 370 Intercollegiate Debate 1 cr.

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or SCTA 371 Intercollegiate Forensics 1cr. or SCTA 379 Internship in SCTA 3-12 cr. 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.

Updated April, 2007

# Teaching English to Speakers of Other Languages (TESOL)

Department of English College of Arts and Sciences

## 245 Kleinpell Fine Arts Building (715) 425-3537 www.uwrf.edu/english/

Laura Zlogar-Chair, Jennifer Brantley, David Furniss, Greta Gaard, Larry Harred, Mialisa Hubbard, Kathleen Hunzer, Nicholas Karolides, Annette Klemp, Steven Luebke, Richard McNamara, James Mulvey, Ronald Neuhaus, Michelle Parkinson, Vladimir Pavlov, Elizabeth Schneider-Rebozo, Robyne Tiedeman, Marshall Toman, Ruth Wood

# General Education Requirements-Liberal Arts

### B.A. and B.S. Liberal Arts Majors

As listed with the following exceptions: Social and Behavioral: TESOL majors and minors should include PSYC 101 among their three social science courses. Mathematics: TESOL majors and minors should take PSYC 201, Behavioral Statistics, to fulfill their mathematics requirement.

B.S. Education Majors As listed.

# 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 311 Introduction to Language and Linguistics 3 cr. ENGL 320 Structure of English 3 cr.

ENGL 322 Acquisition of Language 3 cr.

ENGL 360 Theory and Methodology of TESOL 3 cr.

ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr.

ENGL 420 Pedagogical Grammar 3 cr.

PSYC 315 Psychological Measurement and Evaluation 3 cr.\* COMD 263 Phonetics 3 cr.\*\*

\*Take PSYC 101 for your SB (Social/Behavioral Sciences) and PSYC 201 as your M (Math) General Education requirements because they are prerequisites for the required PSYC 315.

\*\*For TESOL majors, the prerequisites to COMD 263 listed in the catalog will be waived by the 263 instructor or the chair of the Communicative Disorders Department.

### 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 fulfil 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 Eng! lish.)

2. ENGL 378 or any 378, Semester Abroad Research 6 cr. hrs.

3. INTS 377 Semester Abroad 6 cr. hrs.

4. Select two of the following courses: 6 cr. hrs.
ENGL 379 Cooperative Education and Internship II 3 cr.
\*ENGL 450 Non-Native Speakers in the Midwest 3 cr.
\*ENGL 471 Issues in Bilingualism 3 cr.
MODL 376 Mexico: A Cultural Experience 3 cr.

\*If ENGL 450 or ENGL 471 is not taken in the Cultural Component requirements, one of those courses must be taken in this Directed Electives requirement.

## Directed Electives: 6 cr. hrs.

Choose from the following: ECON 312; ENGL 206, 441, 442, 443, 450, 471; ETHN 200; HIST 204, 208, 245; PHIL 245; POLS 212; GEOG 342, 343, 344; COMD 162, 163, 469; PSYC 236, 285, 305, 320; SOWK 260; SOCI/ANTH 205, 211, 221, 225, 228, 348; SPAN 341, 342, 345, 346, 350, 351, 352, 355, 356, 401, 452, 455, 490; FREN 341, 342, 350, 351, 352, 401, 451, 452, 453, 490; GERM 315, 341, 342, 350, 351, 352, 401, 451, 452, 453, 499; SCTA 306, 313, 340; TED 461.

# 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 pursing 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 311 Introduction to Language and Linguistics 3 cr. ENGL 320 Structure of English 3 cr.

ENGL 322 Acquisition of Language 3 cr.

ENGL 360 Theory and Methodology of TESOL 3 cr.

ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. ENGL 420 Pedagogical Grammar 3 cr.

PSYC 315 Psychological Measurement and Evaluation 3 cr.

## Directed Electives: 3 cr. hrs.

Choose from the following:

ECON 312; ENGL 206, 441, 442, 443, 450, 471; ETHN 200; HIST 204, 208; PHIL 245; POLS 212; GEOG 342, 343, 344; COMD 162, 163, 469; PSYC 236, 285, 305, 320; SOWK 260; SOCI/ANTH 205, 211, 221, 225, 228, 348; SPAN 341, 342, 345, 346, 350, 351, 352, 355, 356, 401, 452, 455, 490; FREN 341, 342, 350, 351, 352, 401, 451, 452, 453, 490; GERM 315, 341, 342, 350, 351, 352, 401, 451, 452, 452, 453, 499; SCTA 306, 313, 340; TED 461.

## TESOL Major-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 311 Introduction to Language and Linguistics 3 cr. ENGL 320 Structure of English 3 cr. ENGL 322 Acquisition of Language 3 cr. ENGL 360 Theory and Methodology of TESOL 3 cr. ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr. ENGL 420 Pedagogical Grammar 3 cr.

## COMD 263 Phonetics 3 cr.

Directed Electives: 9 cr. hrs.

Choose from the following:

ECON 312; ENGL 206, 441, 442, 443, 450, 471; ETHN 200; HIST 204, 208, 245; PHIL 245; POLS 212; GEOG 342, 343, 344; COMD 162, 163, 469; PSYC 236, 285, 305, 320; SOWK 260; SOCI/ANTH 205, 211, 221, 225, 228, 348; SPAN 341, 342, 345, 346, 350, 351, 352, 355, 356, 401, 452, 455, 490; FREN 341, 342, 350, 351, 352, 401, 451, 452, 453, 490; GERM 315, 341, 342, 350, 351, 352, 401, 451, 452, 453, 499; SCTA 306, 313, 340; TED 461.

## Required for certification (not counted in major):

TED 428 Techniques of Elementary/Middle/Secondary Education: TESOL 3 cr.

## **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 311 Introduction to Language and Linguistics 3 cr. ENGL 320 Structure of English 3 cr.

ENGL 322 Acquisition of Language 3 cr.

ENGL 360 Theory and Methodology of TESOL 3 cr.

ENGL 373 Techniques in Tutoring: TESOL Practicum 3 cr.

## ENGL 420 Pedagogical Grammar 3 cr.

Directed Electives: 6 cr. hrs.

Choose from the following: ECON 312; ENGL 206, 441, 442, 443, 450, 471; ETHN 200; HIST 204, 208, 245; PHIL 245; POLS 212; GEOG 342, 343, 344; COMD 162, 163, 469; PSYC 236, 285, 305, 320; SOWK 260; SOCI/ANTH 205, 211, 221, 225, 228, 348; SPAN 341, 342, 345, 346, 350, 351, 352, 355, 356, 401, 452, 455, 490; FREN 341, 342, 350, 351, 352, 401, 451, 452, 453, 490; GERM 315, 341, 342, 350, 351, 352, 401, 451, 452, 453, 499; SCTA 306, 313, 340; TED 461.

**Required for certification (not counted in minor):** 

TED 428 Techniques of Elementary/Middle/Secondary Education: TESOL 3 cr.

Updated April, 2007

# **Theatre Arts**

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

## B-24 Kleinpell Fine Arts Building (715) 425-3971 www.uwrf.edu/scta/

Robin Murray-Chair, Suzanne Hagen, Gorden Hedahl, Evan Johnson, James Pratt, Kenneth Stofferahn, Margaret M. Swanson, Barbara L. Werner, Jennifer Willis-Rivera, James Zimmerman

Adjuncts: Denise Baker, Eric Eberhardt, Pat Hanson, Kathleen Olsen, Jeanne St. Claire, Linda Short, Angela Siwik

### **SPECIAL NOTE:**

# Department name and program changes are pending approval and expected for Fall 2007.

# Theatre Arts Major–Liberal Arts B.S. - 36

## Total Credits

### Required Courses: 23 cr. hrs.

SCTA 121 Acting I: Basic Techniques 3 cr. SCTA 131 Design for the Theatre 3 cr. SCTA 284 Sophomore Seminar: Foundations in Communication and Theatre Studies 3 cr. SCTA 288 Career Development: Theatre Arts 1 cr. SCTA 335 Directing I 3 cr. SCTA 337 History of Theatre-Ancient through Renaissance 3 cr. SCTA 338 History of Theatre-18th Century to Present 3 cr. or SCTA 339 American Theatre SCTA 379 Internship 3-12 cr. SCTA 499 Independent Study/Independent Research 1-3 cr.

SCTA 484 Senior Portfolio Seminar in SCTA 1 cr.

### **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. SCTA 332 Stage Costuming 3 cr. SCTA 333 Stage Lighting 3 cr.

### Choose one from the following:

SCTA 221 Acting II: Characterization 3 cr. SCTA 222 Voice and Articulation 3 cr. SCTA 223 Oral Interpretation of Literature 3 cr. SCTA 435 Directing II 3 cr.

## **Choose one from the following:**

SCTA 230 Playwrights of Color 3 cr.

SCTA 334 Playwriting 3 cr.

SCTA 336 Costume and Fashion: Mirror of History 3 cr.

SCTA 338 History of Theatre-18th Century to Present 3 cr.
SCTA 339 American Theatre 3 cr.
Directed Electives: 4 cr. hrs.
SCTA 232 Makeup for Theatre, Film, and Video 3 cr.
SCTA 271 Summer Theatre 1-3 cr.
SCTA 323 Arts Management 3 cr.
SCTA 327 Children's Theatre and Puppetry 3 cr.
SCTA 328 Creative Dramatics for Children and Special Populations 3 cr.
SCTA 375 Theatre Practicum: Production 1 SCTA 376 Theatre Practicum: Design and Technology 1 cr.

## Theatre Arts Minor–Liberal Arts B.S - 24 Total Credits

Required Courses: 15 cr. hrs.

SCTA 121 Acting I: Basic Techniques 3 cr.

SCTA 131 Design for the Theatre 3 cr.

SCTA 335 Directing I 3 cr.

### Choose one from the following:

SCTA 231 Stage Technology and Scene Painting 3 cr.

SCTA 332 Stage Costuming 3 cr.

### SCTA 333 Stage Lighting 3 cr.

### Choose one from the following:

SCTA 337 History of Theatre, Ancient through Renaissance 3 cr.

SCTA 338 History of Theatre-18th Century to Present 3 cr. SCTA 339 American Theatre 3 cr.

### Directed Electives: 9 cr. hrs.

SCTA 221 Acting II: Characterization 3 cr.

SCTA 222 Voice and Articulation 3 cr.

SCTA 223 Oral Interpretation of Literature 3 cr.

SCTA 230 Playwrights of Color 3 cr.

SCTA 231 Stage Technology and Scene Painting (if not chosen under required) 3 cr.

SCTA 232 Makeup for Theatre, Film, and Video 3 cr.

SCTA 271 Summer Theatre 1-3 cr.

SCTA 288 Career Development: Theatre Arts 1 cr.

SCTA 323 Arts Management 3 cr.

SCTA 327 Children's Theatre and Puppetry 3 cr.

SCTA 328 Creative Dramatics for Children and Special Populations 3 cr.

SCTA 332 Stage Costuming (if not chosen under required) 3 cr.

SCTA 333 Stage Lighting (if not chosen under required) 3 cr. SCTA 334 Playwriting 3 cr.

SCTA 336 Costume and Fashion: Mirror of History 3 cr.

SCTA 375 Theatre Practicum: Production 1 cr.

SCTA 376 Theatre Practicum: Design and Technology 1 cr. SCTA 435 Directing II 3 cr.

SCTA 379 Internship in SCTA 3-12 cr.

SCTA 499 Independent Study/Independent Research 1-3 cr.

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.

Updated April, 2007

# Women's Studies (WMST) Interdisciplinary Program

# B23 Kleinpell Fine Arts Building (715) 425-4895 www.uwrf.edu/womens\_studies/

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 3 cr. hrs.

WMST 200 Introduction to Women's Studies 3 cr. Directed Electives–select at least 6 courses from the following: 20 cr. hrs. WMST 205 Women's History: United States 3 cr.

WMST 206 Family Communication 3 cr. WMST 214 Women in Literature 3 cr. WMST 220 Gender Issues in Science 3 cr. WMST 221 Global Perspectives on Women 3 cr. WMST 235 American Autobiography 3 cr. WMST 300 Women and Film 3 cr. WMST 303 Women's History: Europe 3 cr. WMST 305 Women's History: Global Perspectives 3 cr. WMST 314 Women and Politics 3 cr. WMST 323 Sociology of the Family 3 cr. WMST 326 Sociology of Gender Roles 3 cr. WMST 354 Women and the Law 3 cr. WMST 379 Internship in Women's Studies 2-3 cr. WMST 389 Topics in Women's Studies .5-3 cr. WMST 440 Gender Communication 3 cr. WMST 443 American Ethnic Women Writers 3 cr. WMST 499 Directed Studies 1-3 cr. BLAW 389 Special Topics in Business Law: Sexual Harassment and the Law 1 cr. ECON 312 Political Economy of Discrimination 3 cr. HEAL 460 Teaching of Family Life and Sex Education 2 cr. PSYC 225 Psychology of Sex Differences 3 cr.

## **COURSE DESCRIPTIONS**

Accounting		Humanities	
Agriculture, Food and Environmental Sciences	130	Interdisciplinary Humanities	
Agricultural Education		Interdisciplinary Science	
Agricultural Engineering		Interdisciplinary Social Science	
Animal Science		International Studies	
Anthropology		Japanese	
Art		Journalism	
Broad Field Social Studies	141	Marketing Communications	
Biology	141	Mathematics	
Biotechnology		Marketing	
Business Law		Management	191
College of Business and Economics		Modern Language	
Chemistry		Music	
Chinese		Music Applied	
Criminal Justice	148	Music Ensembles	
Communicative Disorders		Physical Education (Gen Ed Hw Courses)	
Counseling		Physical Education Professional	
Crop Science		Physical Education Testout	
Computer Science and Information Systems		Philosophy	
Dance		Physics	
Dairy Science		Pigeon Lake	
Economics		Pigeon Lake Art	
English		Pigeon Lake Biology	
Environmental Studies		Political Science	
Environmental Science and Management		Psychology	
Ethnic Studies		Reading	
Food Science		Speech Communications Honors	
Film Studies		Summer Consortium	
Finance		Speech Communication and Theatre Arts	212
French		Sociology	
General Engineering	170	Soil Science	219
Geography		Social Work	
Geology		Spanish	221
German		School Psychology	
Health		Senior Seminar Honors	
History		Teacher Education	
Honors		University Studies	
Horticulture		Wisconsin In Scotland	
Humanities Honors		Women's Studies	

# **COURSE DESCRIPTIONS**

## NOTE: Some courses listed without a course description may not have been offered recently. Check with the department for availability.

### ACCOUNTING

### ACCT 201 Survey of Accounting

A survey course designed for nonbusiness majors who realize the value of possessing basic accounting knowledge. This course takes the student through the basics: What accounting information is, what it means and how it is used. Students examine financial statements and discover what they do and do not communicate. This course may not be used to meet the credit requirements in the Accounting and Business Administration major. This course fulfills the accounting requirements for a business minor. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite.(Sp)

### ACCT 231

### Principles of Accounting I

Introduction to financial accounting as an information system, double-entry, business income, accounting cycle, assets, liabilities, capital, and retained earnings. Prerequisite: second semester freshman standing. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (F, Sp, SS)

### ACCT 232

Principles of Accounting II

Introduction to the information needs of internal management for decision making; use and interpretation of accounting data in the planning and controlling of business activities, cost accounting, variance and statement analysis, and statement of cash flows. Prerequisite: ACCT 231. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (F, Sp, SS)

### ACCT 279 1 cr. Cooperative Education and Internship

ACCT 289 0.5-3 cr. Special Topics in Accounting

### ACCT 321

**Intermediate Accounting I** This course is designed to provide an in-depth study of current financial accounting theory and concepts. Generally accepted accounting principles applicable to business income measurement, the

related asset and equity valuations, and

reporting and disclosure requirements are developed in the context of present day accounting practice. Prerequisite: ACCT 232. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (F)

## ACCT 322

3 cr.

3 cr.

3 cr.

3 cr.

Intermediate Accounting II This course is a continuation of Accounting 321. The focus in this class is on accounting relating to business enterprisesA? decisions concerning financing, acquisitions, presentation of information in financial statements, and financial statement analysis. Areas studied include accounting theory and practice pertaining to bonds, stockholdersA? equity, including transactions regarding issuing stock, purchasing treasury stock, dividends, stock splits, and retained earnings, basic and fully diluted earnings per share and dilutive securities.Prerequisite: ACCT 321. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (Sp)

#### ACCT 324 Non-Profit Accounting

Non-profit accounting focuses on the study of accounting procedures and financial statement presentation for the federal, state and local governments and on organizations who have been specifically created to be nonprofit, i.e., colleges and universities, health and welfare agencies, and churches. Prerequisite: ACCT 232.

#### ACCT 356 Managarial Cost Acce

Managerial Cost Accounting

Concepts and techniques of reporting to internal users of financial information will be emphasized along with planning and control, product costing and special decisions. Prerequisite: ACCT 232. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (F)

### **ACCT 357**

Advanced Managerial Cost Accounting This course is designed to use the case method to study management planning and control systems, product costing, standard costs, responsibility centers and decision making. Prerequisite: ACCT 356. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (Sp)

#### ACCT 360 Federal Income Tax I

3 cr.

Students will study the principles of federal income taxation with emphasis on individuals. Gross income, exclusions,deductions, exemptions, capital gains and property transactions are covered. Problems and legal research included. Prerequisite: ACCT 231. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (F)

## ACCT 361

3 cr.

3 cr.

3 cr.

3 cr.

### Federal Income Tax II

Principles of federal income tax related to corporations, partnerships, estates and trusts are covered. Emphasis on tax administration and tax research. Prerequisite: ACCT 360. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (Sp)

### **ACCT 366**

3 cr.

3 cr.

Accounting Systems Students will study the analysis and design of accounting information systems: including equipment, forms, flowcharts, records, internal control and both manual and electronic data processing. Prerequisites: ACCT 321 and 356. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (F,Sp)

### ACCT 378

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)

#### **ACCT 379**

3-6 cr.

6 cr.

**Internship in Accounting** The internship involves approximately three months working as a full-time employee with a cooperating CPA firm doing tax or auditing work or doing accounting, marketing or management tasks, depending on the situation. Internship is usually at full salary. Internships in the College of Business and Economics are graded on a pass/fail basis. No more than 3 internship credits may apply toward electives in the major. Prerequisites: open only to accounting majors and consent of department chair and the dean of the College of Business and Economics. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (F, Sp, SS)

### ACCT 389 Special Topics in Accounting

The study of topical issues in accounting. Sample topics include accounting in the year 2000, implementation of recent FASBs by profit and not-for-profit organizations, the application of new auditing pronouncements and recent developments in international accounting. Prerequisites: ACCT 321 and 356, (upon student request)

0.5-3 cr.

3 cr.

3 cr.

3 cr.

## ACCT 430

Advanced Accounting

Theory and practice of financial accounting pertaining to business combinations and corporate consolidations using the cost and equity methods, partnerships, multinational enterprises, segment and interim reports, and not for profit accounting. Prerequisites: ACCT 322. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (F)

### ACCT 461 Auditing

This is the writing intensive course for Accounting majors. Philosophy and techniques of auditing, including work paper presentation and audit report writing will be emphasized. Prerequisites: ACCT 322 and 366, grades of C or better in these courses are required. (Sp)

### ACCT 462

**Information Systems Auditing** Auditing in a computer-intensive environment. Information systems control, forensic accounting, auditing through the computer, and generalized audit software will be emphasized. Prerequisite: ACCT 461. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (Sp)

ACCT 489 Special Topics in Accounting	0.5-3 cr.
ACCT 490 Readings - Accounting	1-3 cr.
ACCT 499	1-3 cr.

### **Independent Study**

Independent study is an opportunity for upper class students to select a project in an area of business and work independently with an assigned professor. Open only to accounting. Prerequisites: at least a 2.5 GPA in accounting and business law courses, upper class standing and consent of department chair. Technological prerequisite: Basic knowledge of Windows operating systems and the Microsoft Office suite. (F, Sp, SS)

### AGRICULTURE, FOOD AND ENVIRONMENTAL SCIENCES

### AFES 223 Agricultural Biotechnology Lab Techniques

This course is an introduction to biotechnology laboratory techniques for students outside of the biotechnology major. The laboratory will include applications from the animal, plant, food, and environmental sciences. Teaching these techniques to others will also be addressed. Laboratory binder and safety goggles required. Prerequisite: BIOL 150. Pre- or corequisite: ANSC 222.

### AFES 310 Agricultural Human Resource Management

This course focuses on human resource management in the context of farms, greenhouses, landscapers, and other small agricultural businesses. The course will have seven sections: Developing a Vision, Designing Jobs, Handling External Factors, Hiring, Starting New Employees, Keeping Employees, and Managing a Multicultural Workforce. Prerequisite: At least Junior Standing. (F, Sp)

### AFES 492

Experiential Learning in Agriculture, Food, and Environmental Science

Student teams, with members from at least two academic disciplines, will collaborate with faculty mentors and a farm, agribusiness, or public agency to develop a solution to a problem. The multi-disciplinary student teams will analyze the consider alternative solutions, negotiate recommendations, and present their solutions and recommendations to the farmer or business person who owns the problem. Prerequisites: senior standing or consent of instructor.

### AGRICULTURAL BUSINESS

### **AGBI 251**

3 cr.

### **Agricultural Biochemistry**

The course is an introduction to agricultural biochemistry. Emphasis is on chemical compounds pertaining to agricultural and biological processes. Prerequisites: CHEM 230 or 231. (F, Sp)

### AGBI 252

1 cr.

### **Agricultural Biochemistry Lab**

The course is an introduction to biochemistry laboratory techniques. The laboratory will include both plant and animal topics. Prerequisites: AGBI 251 or CHEM 361. (F, Sp)

# AGBI 289

1 cr.

3 cr.

3 cr.

### 0.5-3 cr. Special Topics in Agricultural Biochemistry

This course provides the opportunity to study a selected topic in Agricultural Biochemistry.

### **AGBI 389**

### 0.5-3 cr. Special Topics in Agricultural Biochemistry

This course provides the opportunity to study a selected topic in Agricultural Biochemistry.

### AGBI 451

2 cr. Molecular Biology

AGBI 489 0.5-3 cr. Special Topics in Agricultural Biochemistry

### AGRICULTURAL ECONOMICS

#### AGEC 101 3 cr.

### Economics and Management in the Food and Fiber Sector

Econ and Management in Ag will provide students with an overview of the structure of the food and fiber sector (including the development of value chains and global agricultural markets), discuss the role of management in agribusiness managers address key economic and management issues. Students will visit several firms within a typical agricultural supply chain during the semester.

### AGEC 230

3 cr.

### **Agricultural Economics I**

An examination of the economic theory of the firm as applied to agriculture. An introductory analytical approach to efficient resource use primarily directed at production functions, factor-factor choices, product-product choices, cost functions, supply and demand functions, and static and dynamic market behavior. Prerequisite: MATH 146 or higher. (F, Sp, SS)

### **AGEC 231**

### **Agricultural Economics II**

An examination of the economic development of agriculture and related industries in the United States including national income and employment, the role of agriculture within the broader economy and the interaction of agriculture with the rest of the national and international economy. (Sp)

### **AGEC 240** Cooperatives

This course discusses the structure, development, and history of cooperatives in the United States. The application of economic concepts to cooperatives will be discussed and key opportunities and challenges of this business form will be developed. (F,Sp)

### **AGEC 250**

#### World Food and Populations (g)

A survey course of trends and determinants of population growth trends and food production as influenced by environmental, institutional and cultural factors. International efforts in agricultural development and trade, and government policies to address food and population issues will be discussed. (Sp)

#### **AGEC 270** Internship I

Students obtain professional work experience with a cooperating employer. Individualized learning objectives are established for each participant. The completion of a special project at the internship site is an integral part of the experience. Prerequisite: 30 sem. cr. and consent of faculty coordinator. (F, SP, SS)

#### **AGEC 271**

#### **International Internship**

An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Special course fees required. Prerequisites: 30 semester credits. (F, Sp, SS)

### **AGEC 289**

**Special Topics in Agricultural Economics** This course provides the opportunity to study a selected topic in Agricultural Economics.

### **AGEC 305**

**Agricultural Business Accounting** 

A study of accounting systems and methods appropriate for farms and agricultural businesses including the use of basic information-recording skills to allow for the construction of financial statements and filing of income tax forms. Prerequisites: AGEC 230 (F, Sp)

#### **AGEC 320** 3 cr.

2 cr.

3 cr.

2-4 cr.

4 cr.

0.5-3 cr.

3 cr.

### **Statistical Methods**

Introduction to statistical methods commonly used in agricultural business. Topics include data presentation, measures of central tendency and dispersion, probability, estimation, hypothesis testing, index numbers, analysis of variance and regression. Prerequisites: MATH 146, AGEC 230. (F, Sp)

#### **AGEC 330** 3 cr. **Agricultural Production Economics and Operations Research**

An applied economic theory course that emphasizes agricultural firm decision making including time considerations and the incorporation of risk and uncertainty. Prerequisites: AGEC 230, MATH 156 or 166.

### **AGEC 345** Agricultural Law

A survey course that includes the sources of laws affecting agricultural businesses and markets; the creation and enforcement of contracts; provisions controlling inheritance, trespass, and other specific laws of particular interest to agriculture. (F)

#### **AGEC 355** 3 cr. **Agricultural Markets and Prices**

This is a writing intensive course. The course is divided between a survey of market practices and policies and analytical methods of price analysis. Prerequisite: AGEC 230. (F, Sp)

### **AGEC 360** Farm Management

An introduction to farm management with emphasis on analytical methods associated with the economics of farm planning. Topics include balance sheets, income statements, cash flows, budgets, and present value analysis and the application of firm theory. Prerequisite: AGEC 230; (F, Sp)

### **AGEC 361**

**Horticultural Business Management** An introduction to horticultural business management with emphasis on analytical methods associated with the economics of horticultural business planning, Topics include balance sheets, income statements, cash flows, present values analysis and the application of firm theory in a decisionmaking environment. Prerequisites: AGEC 230. (Sp)

### **AGEC 365 Agricultural Finance**

The course is divided between the survey of financial institutions and analytical methods useful in financial planning and evaluation. Topics include financial analysis of balance sheets; income statements; cash flow;

financial budgeting, including present value methods; risk models; and agricultural lending institutions. Prerequisite: AGEC 230. (F, Sp)

#### **AGEC 370** 2-4 cr. **Internship II**

Students obtain professional work experience with a cooperating employer. Individualized learning objectives are established for each participant. The completion of a special project at the internship site is an integral part of the experience. Prerequisite: Ag 270 and consent of faculty coordinator. (F, Sp, SS)

3-6 cr.

6 cr.

3 cr.

3 cr.

### **AGEC 378** Semester Abroad

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)

### **AGEC 379** Semester Abroad

**AGEC 389** 0.5-3 cr. **Special Topics in Agricultural Economics** 

### **AGEC 405**

### **Record Analysis and Tax**

A study of methods of analyzing farm records and farm financial statements including methods of income tax preparation for sole proprietorships, partnerships and corporations. Accounting procedures to minimize income tax liability are examined. Prerequisite: Ag Econ. 305. (Sp, alternate years)

#### **AGEC 410**

**Professional Selling** 

Professional Selling is a course designed for seniors considering a career where professional selling skills will be necessary. The course uses a needs-based approach to selling that recognizes both the technical competence and the human relations components of professional selling. Prerequisite: senior standing or permission of the instructor.

### **AGEC 440**

### 3 cr.

**Agricultural Policy I** This is a writing intensive course. Economic analysis of adopted and proposed government policies regarding agriculture are covered, including consideration of the significance of the institutional environment on agricultural policy. Prerequisite: AGEC 230. (F)

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

### AGEC 441

### 3 cr.

3 cr.

3 cr.

3 cr.

1-3 cr.

Agricultural Policy II This course emphasizes the relationship between macroeconomic policy and agriculture. International trade issues including trade distorting policies of major trading countries, exchange rate issues, and the importance of economic development in the growth of third world markets are examined. (Sp)

### AGEC 450

### Introduction to Natural Resources Economics

This is a survey course emphasizing reasons for natural resource misallocation including property rights and common property resources, externalities, and public good problems. Consideration is given to the equity and efficiency implications of public policies to direct the use of energy resources, minerals, water, forests, and fisheries. Considerable emphasis is placed on the economics of pollution control. Prerequisite: AGEC 230 or ECON 201. Colisted as AGEC 450. (F)

### AGEC 456

### Commodity Marketing

An examination of commodity markets, cash and futures, and fundamental and technical methods of price analysis for commodities. The emphasis is on grain, livestock, and dairy, but financial instruments are included. Prerequisite: AGEC 355. (Sp)

AGEC 457	3 cr.
Dairy Marketing	

### AGEC 460

**Agri-Business Firm Management** 

This is a writing intensive course. A study of the application of managerial tools and techniques to agribusiness firms. Topics include small business firm financial structure and analysis, small staff personnel management, promotion, product mix, competitive behavior, and management behavior of cooperative firms. (Sp)

AGEC 489	0.5-3 cr.
Special Topics in Agricultural	Economics

### AGEC 490

**Independent Study** Students will pursue independent study in the field of Agricultural Economics and Agricultural Business. Prequisite: consent of instructor. (F, Sp, SS)

AGEC 495	1-3 cr.
Special Problems in Agricultural	
Economics	

### r. AGRICULTURAL EDUCATION

#### AGED 110 Agricultural Communications

The course is designed to analyze the role of communication in agriculture. Emphasis is on the six contexts of communication, from intrapersonal to organizational agricultural communications. Students have the opportunity to write and be published in print and broadcast media. Opportunity to focus on an area of interest and to develop oral communication skills through small group activities, speeches, guest presentations and a student-designed agricultural communications plan. (F, Sp)

### AGED 120 Orientation to Agricultural and Extension Education

This course will provide an overview of agricultural education career pathways including goals and purposes, and will examine agricultural education in secondary, post-secondary, and non-school settings. Topics will include extension, government, international and industry organizations, introduction to certification requirements, professional development, and current issues.

#### **AGED 140**

### Strategies for Academic Excellence This course provides both the first-time and returning students with the specific skills and strategies to accomplish their academic goals with success. Students are introduced to a variety of topics critical to this process: time management, setting priorities, learning styles, campus resources, critical thinking, diversity, motivation, and test taking skills. Students will demonstrate understanding of these topics through small group discussions, class activities, quizzes, homework assignments, oral presentations, exams, and by attending guest presentations. (F, Sp)

### **AGED 201**

**Program Delivery in Agricultural, Extension, and Leadership Education** This course introduces the formal and nonformal methods used to deliver education and training in agricultural, extension, and leadership education programs. Post secondary and international level programs will be emphasized. A technology supported lab component provides skills needed to develop teaching and training materials. Prerequisite: AGED 110 or 120. (F, SP)

### **AGED 202**

**Leadership and Group Dynamics** Principles of leadership applied to contemporary situations will be discussed. Considerable emphasis will be placed on leadership techniques, especially the proper use of parliamentary procedure. (F, Sp)

3 cr.

2 cr.

2-4 cr.

4 cr.

## AGED 230

3 cr.

1 cr.

2 cr.

2 cr.

3 cr.

### Agricultural Newswriting

This is a writing intensive course. Students will review journalistic writing techniques that include copy-editing, style, spelling, policy and ethics. Students proceed to discuss and practice specific agricultural writing topics. Practical experience is gained by submitting stories to The FencePost, the College of Agriculture, Food and Environmental Sciences' alumni newsletter; Student Voice, the campus newspaper; The Country Today, a weekly rural publication; CAFES' Cable/TV; and to additional print media open to publishing student work. Visits by media professionals and tours are incorporated into this class. Co-listed as JOUR 230. Prerequisites: AGED110, JOUR 112. (Sp)

### AGED 260

**Professional Careers in Agriculture** Students obtain knowledge and skills in planning for career challenges in agriculture. The course is designed to identify personal strengths and to develop career goals through self-evaluation exercises and inventories. Students develop networking and informational interviewing skills through guest presentations, class discussion, and by attending workshops and career fairs. Emphasis will be placed on creating a portfolio, developing a resume, writing cover letters, and practicing interview skills for internships and jobs. Students will participate in the mock interview process. (F)

### AGED 270 Internship I

With assistance from a faculty coordinator, students participate in a professionallevel work experience with a cooperating employer. Individualized learning objectives are established for each student. Completion of a special project at the internship site is an integral part of each work experience. (F, Sp, SS)

#### AGED 271 International Internship

An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Special course fees required. Prerequisite: 30 semester credits.(F, Sp, SS)

### AGED 275 1 cr. Agricultural Education Early Field Experience

This course provides the opportunity to observe the multiple roles of an effective agricultural educator. The course also promotes the development of a greater level of understanding of the education enterprise. Course objectives are addressed through 30 hours of documented participation in a middle/high school and participation in course seminars. Prerequisite: AGED 120 or consent of instructor.

#### **AGED 289** 0.5-3 cr. **Special Topics in Agricultural Education**

**AGED 290** 2 cr. **Professional Careers in Agriculture** 

#### **AGED 369** 3 cr. Foundations of Career and Technical Education

The purpose of this course is to develop an understanding of the philosophical and practical basis of career and technical education programs. The course involves an exploration of the position career and technical education programs should occupy in public education ( secondary and post-secondary), and involves a study of the historical, legislative, social and economic aspects of career and technical education in relation to the public education system. Junior Standing. (Sp)

#### **AGED 370** Internship II

A second faculty-supervised professional work experience with individualized learning objectives. Prerequisites: AGED 270, consent of faculty coordinator and the internship director. (F, Sp, SS)

## **AGED 378**

Semester Abroad

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)

#### **AGED 389** 0.5-3 cr. **Special Topics in Agricultural Education**

#### **AGED 403** 3 cr. Supervision of Work Experience and **Youth Organizations**

The purpose of this course is to prepare students to advise agricultural youth organizations and to coordinate agricultural work-based learning, including supervised agricultural experience programs. Emphasis will be placed on legal aspects, maintaining student records, and completing award applications. This is a writing intensive course. Prerequisites: AGED 369 or consent of instructor.(F)

### **AGED 462 Curriculum Design in Vocational** Education

This is a writing intensive course. Students will gain theoretical and practical knowledge and experience in planning, development of curricular materials, equipment and facilities for secondary vocational education programs. Study of management and organization of instructional settings is included. Prerequisites: AGED 201 and 369. (F)

**AGED 472** 3 cr. **Curriculum Design in Vocational** Education

**AGED 479** Philosophy of Vocational and **Cooperative Education** 

**AGED 489** 0.5-3 cr. **Special Topics in Agricultural Education** 

**AGED 490** 

2-4 cr.

3-6 cr.

**Special Problems** Independent and group study of problems in the field of Agricultural Education will be emphasized. Prerequisite: consent of instructor. (F, Sp, SS)

## **AGED 495 Special Problems**

### AGRICULTURAL **ENGINEERING**

#### **AGEN 112** Wood Technology

Processing of wood materials and their use in fabrication and construction. Selection, safe operation and maintenance of hand and power tools. Emphasis will be placed on the development of skills for K-12 vocational and technical education majors.(Sp)

**AGEN 113** Metalwork Technology

### **AGEN 150**

### 3 cr. Introduction to Agricultural Engineering

A study of engineering concepts and principles as they apply to bio-systems engineering. Major emphasis will be placed on the technical areas of food and process engineering, information and electrical technologies, power and machinery, soil and water, and structures and environment. The laboratory will provide an opportunity for the student to develop skills in the areas of problem solving and the collection and analysis of data. (F, Sp)

#### **AGEN 185**

3 cr.

4 cr.

1-3 cr.

### **Agricultural Engineering Technology Professional Seminar I**

Orientation to the discipline of Engineering Technology with an emphasis toward Biosystems and Environmental Engineering. Introduction to the applied design process, formulation of problem statements, and the presentation of alternative solutions.

#### **AGEN 240** 3 cr. Structures

A study of construction processes for agricultural, commercial/industrial, and residential structures. Topics include building codes, materials of construction, structural design of wood members, and load analysis. Prerequisites: AGEN 150, MATH 146. (F)

AGEN 250	3 cr.
Statics	

### **AGEN 255**

3 cr.

0.5-0.5 cr.

Welding and Metal Manufacturing Fundamental concepts of welding and metal machines and forming processes. Set up of common welding and cutting processes. Metallurgical effects of welding on metals and tests for welds. Basic machine tool and metal forming processes. Set up and operation of numerically controlled machine tools. (Sp)

#### **AGEN 260** 2 cr. **Plastics Technology**

**AGEN 270** 2-4 cr. Internship I Students obtain professional work experience with a cooperating employer. Individualized learning objectives are established for each participant. The completion of a special project at the internship site is an integral part of the experience. Prerequisites: 30 sem. cr. and

consent of faculty coordinator. (F, Sp, SS)

### **AGEN 271**

### **International Internship**

An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Special course fees required. Prerequisites: 30 semester credits. (F,Sp,SS)

#### **AGEN 285** 0.5-0.5 cr. **Agricultural Engineering Technology Professional Seminar II**

Technical seminar in Engineering Technology with an emphasis toward Biosystems and Environmental Engineering. Engineering internships and careers, ethics, design analysis, elements of

## 133

4 cr.

2 cr.

1-4 cr.

2 cr.

engineering communication and reporting. Prerequisite: AGEN 185.

0.5-3 cr.
2 cr.
2 cr.
2 cr.
<b>3 cr.</b> , also nd 150. (Sp)

AGEN 321	2 cr.
Small Utility Engines	

### AGEN 322

**Combustion Engines Analysis** 

This course includes the study of internal combustion engine modifications, measures of operating efficiency and the use of testing equipment. Prerequisite: AGEN 320. (Sp, alternate years)

#### **AGEN 325**

Alternate Energy Systems

A study of agricultural biomass conversion and solar energy systems with special emphasis on alcohol fuels and application of solar energy. Engine and burner modification requirements, raw material sources and licensing procedures are examined. Prerequisite: CHEM 121 or equivalent. (Sp)

#### **AGEN 333**

#### Landscape Construction

Construction techniques related to the installation of structural components in commercial and residential landscapes. Topics include retaining walls, decks and steps, patios, planters, shade structures, fountains, and swimming pools. Prerequisites: AGEN 150 or GENG 235, HORT 250 or consent of instructor.(Sp, alternate years)

#### AGEN 340 Stray Voltage

1 cr.

### Causes and cures for stray voltage are presented. Emphasis is on detection and practical solutions. Field trips to nearby farms provide practical use of the theory. (upon student request)

AGEN 350 Applied Electricity

Students will study electrical fundamentals designed to promote sound application and use of this energy source. Circuits, controls, materials, regulations and applications are considered both in theory and application. (F)

AGEN 352 3 cr. Food and Process Engineering Engineering concepts applied to food processing will be explored. Conversion of physical dimensions, mass balance, heat transfer, mass transfer, and process control technology. Co-listed as FDSC 352. Prerequisites: PHYS 151 and FDSC 112 or AGEN 150.(F)

Irrigation and Drainage This is a writing intensive course. Course content covers irrigation and drainage principles and design practices including: materials selection, systems, layout, economic costs and returns, and a review of soil-water-plant relationships and their effect on water requirements for crop production. Prerequisites: AGEN 150 and SOIL 210. (Sp)

### **AGEN 361**

**AGEN 355** 

3 cr.

3 cr.

3 cr.

#### **Machinery and Power Mechanics**

Basic principles and mechanisms of power transmission and farm machinery will be covered. Hydraulic principles and application are included. Prerequisite: AGEN 150.(F)

### AGEN 363

**Precision Agriculture Technology** The course presents the concepts of precision agriculture and the applications of these technologies to production agriculture. Major topics include: electronic sensors and controllers, variable rate technology, global positioning systems, geographic information systems, yield mapping, and interpretation of data collected with these systems. Prerequisite: CROP 161, SOIL 210, AGEN 150. Necessary computer skills: familiarity with spreadsheets and word processing software. (F)

### AGEN 365 Waste Management Systems

This is a writing intensive course. Fundamentals of managing agricultural wastes including livestock manure, crop residues, and processing wastes. The physical chemical and biological characteristics of wastes required for the design of waste management systems will be reviewed. The principles of design and selection of waste management processes and equipment will be studied. Prerequisite: CHEM 121 or equivalent. (F)

#### AGEN 370 Internship II

3 cr.

3 cr.

4 cr.

3 cr.

3 cr.

2-4 cr.

Students obtain professional work experience with a cooperating employer. Individualized learning objectives are established for each participant. The completion of a special project at the internship site is an integral part of the experience. Prerequisite: AGEN 270 and consent of faculty coordinator. (F,Sp,SS)

### AGEN 378 3-6 cr. Semester Abroad

The research component of the Semester Abroad program. A semester of directed research in a European country. Taken in conjunction with INTS 377. Prerequisites: participation in the Spring Semester Abroad orientation seminar; 2.25 GPA; junior or senior standing. ((F)

AGEN 385 0.5-0.5 cr. Agricultural Engineering Technology Professional Seminar III

Technical seminar in Engineering Technology with an emphasis toward Biosystems and Environmental Engineering. Engineering professional development, engineering risk analysis and decision processes, cultural issues in engineering, and exploration of engineering communication and reporting. Prerequisite: AGEN 285.

AGEN 389	0.5-3 cr.
Agricultural Engineering	Technology

AGEN 401	3 cr.
Explor Indust Elementary School	
AGEN 406	3 cr.
World of Construction	

AGEN 407	3 cr.
World of Manufacturing	

### AGEN 425 4 cr.

**Environmental Engineering Technology** The design and management of systems for pollution control and waste management through prevention, pollutant removal and destruction are investigated. Topics include water treatment, waste water treatment, air pollution control, indoor air quality and solid waste management. Prerequisites: AGEN 365 and SOIL 210. (Sp, alternate years)

### AGEN 440 4 cr. Soil and Water Conservation

The need to conserve soil and water resources and the methods of doing so will be examined. Emphasis is placed on predicting and controlling soil erosion from cultivated land, techniques for maintaining high levels of crop production while conserving soil and water conservation structures. Prerequisites: Computer proficiency or CSIS 105, MATH 146 and SOIL 210. Co-listed as SOIL 440. (F, Sp)

# AGEN 443

**Contr Environment and Struc Des** Design concepts of controlled environment systems for agricultural, commercial and residential structures are examined. Emphasis will be placed on planning, operation and management of integrated controlled environment systems. Prerequisites: AGEN 240. (F, alternate vears)

# **AGEN 451**

# Agricultural Instrument and Elec

This is a writing intensive course. Practical use of modern electronic devices and systems in agriculture is stressed. Automation, analysis, design, fabrication and evaluation of electronic systems is performed. Prerequisite: AGEN 350 or equivalent. (Sp)

# **AGEN 455**

Advanced Food and Process Engineering Principles and techniques in handling and processing agricultural and food products are studied. Areas of study include handling, pumping, sorting, grading, size reduction, mixing and separation technology. Prerequisite: AGEN 352. (F, alternate years)

# AGEN 465 Fluid Power Systems

Students will learn the fundamentals of fluid power systems and how they generate, transmit and control power through the use of pressurized fluid within an enclosed circuit. Prerequisite: AGEN 361. (Sp, alternate years)

# AGEN 485 0.5-0.5 cr. Agricultural Engineering Technology Professional Seminar IV

Technical seminar and design course in Engineering Technology with an emphasis toward Biosystems and Environmental Engineering. Importance of continued contribution to the profession after graduation and professional licensure is explored. Design project posed by industry professionals. Project completion requires engineering design process, teamwork, leadership, and communication. Prerequisite: AGEN 385. (F, Sp, SS)

# AGEN 489 0.5-3 cr. Agricultural Engineering Technology

AGEN 490 1-3 cr.

# Independent Study: Agricultural Education

Continuation of study in selected areas of agricultural and environmental engineering technology. Prerequisite: consent of instructor.

AGEN 495	1-3 cr
Special Problems	

# ANIMAL SCIENCE

# ANSC 111

3 cr.

2 cr.

3 cr.

2 cr.

**Introduction to Animal Science** 

This course includes a study of the application of basic sciences, animal genetics, physiology, nutrition and disease control to livestock production, processing and merchandising. Laboratory manual required. (F, Sp)

# ANSC 115 Animal Welfare

This course examines the basic concepts

of animal welfare and the ethical issues involving the use of animals in our society. (F, Sp, SS)

# ANSC 121 2 cr. Companion Animals

This course will provide students with a basic knowledge of several species of companion animals kept as pets, such as dogs, cats, birds, fish, reptiles, amphibians, and small mammals. Topics will include breeds of animals, nutrition, reproduction, health, behavior, handling, and care. The human-animal bond will also be studied. (Sp)

# ANSC 167 2 cr. Equine Management and Equitation

A study of proper techniques of equitation including riding theory and application, fit and use of equipment and groundwork. Horse management topics will cover identification of correct and incorrect conformation of the horse, diseases, parasites, feeding, breeding, and proper facilities necessary to select, care for and maintain a healthy horse. (F, Sp)

### ANSC 168

### Equine Equitation and Management Lab Laboratory sessions devoted to the application of the mounted and unmounted theory and techniques presented in ANSC

theory and techniques presented in ANSC 167. The balanced seat will be emphasized with work on the flat and over fences. Safe, effective management of common problems encountered while caring for sport, recreational, and breeding horses will be in a hands-on environment. Students will be assigned to laboratory sessions based on their previous experience. (F, Sp)

# 1 cr.

3 cr.

Dairy Manufacturing I The introduction of scientific principles including chemistry, microbiology and physics to the processing of fluid and dehydrated milk systems and their control. Demonstration of basic processing operations will include heating, cooling, homogenization, evaporating, drying,

crystalization and freezing. Co-listed as FDSC 202. (F)

# ANSC 211

3 cr.

3 cr.

ANSC 202

3 cr.

2 cr.

Livestock and Carcass Evaluation This is a study of the basic principles of selection for the major livestock species-beef cattle, swine, and sheep. Topics will include selection of breeding stock and evaluation of market animals and carcasses. Emphasis will be placed on practical selection of breeding stock utilizing visual appraisal and production records with a major focus on improvement of the final meat product. Therefore significant effort will be devoted to grading and pricing of market animals and carcasses and the correlation between the two. Prerequisites: ANSC 111 and sophomore standing. (F)

# ANSC 213

### **Equine Evaluation**

Evaluation of the conformational, structural and performance abilities of light horses to include comparative judging and oral reasons. (Sp)

# ANSC 222 2 cr. Introduction to Biotechnology

This course is primarily intended for nonscience and first- or second-year science majors. Students will explore the basics of biotechnology and its application in the industries associated with medicine, food production, forestry and waste management. The social issues raised by the use of biotechnology will also be discussed. The sciences necessary for the understanding of the basics of biotechnology will be provided in the course. Students will cover a variety of topics from DNA fingerprinting, genetic engineering to designing new foods. Prerequisites: BIOL 150 or ANSC 111 or HORT/CROP 161 or CHEM 100. (Sp, alternate years)

# ANSC 231 Principles of Nutrition

2 cr.

# 3 cr.

Introduction to principles of nutrition presented on a comparative species basis including characteristics, physiological functions, interrelationships, and deficiency symptoms as they pertain to carbohydrates, fats, proteins, mineral elements, and vitamins. Class Manual fee required. Prerequisite: BIOL 150, ANSC 111 or HORT/CROP 161.

# ANSC 232

**Applied Feeds and Feeding** 

Physical and chemical characteristics of feeds, effects of storage and processing methods, quality control, feed additives, feeding standards, ration formulation for farm animals, and reviews of research literature. Prerequisite: ANSC 231. (F, Sp)

# **ANSC 238**

# Meat and Meat Products

An introductory course in Meat Science where students will learn the basic procedures and practices employed for conversion of livestock to final retail product. Particular emphasis will be given to factors influencing final eating quality and product safety. In addition, the scope, size, and current challenges to the meat industry will be discussed. Prerequisites: ANSC 111 or FDSC 112 and CHEM 110 or 121. (F, Sp)

# **ANSC 240**

# Meat Product Processing

The study and practice of commercial meat processing methods including curing, smoking, sausage manufacturing and the manufacturing of ready-to-serve meat products. Prerequisite: ANSC 140. Colisted as FDSC 240. (Sp)

# **ANSC 257** Genetics

A study of the basic principles of Mendelian and population genetics, the biological role of nucleic acids, reviews of the classical literature, and concepts of genetic engineering. Prerequisite: BIOL 100 or ANSC 111 or HORT/CROP 161.

# **ANSC 260**

(F,Sp)

# **Animal Physiology**

Basic anatomy and the integration of body regulatory systems will be studied. Prerequisite: BIOL 100 or ANSC 111, or CROP or HORT 161. (F, Sp)

# ANSC 261

# **Advanced Horsemanship**

Students will perform advanced training of the western performance horse, including reining horse maneuvers. Emphasis is placed on developing softness, suppleness and control of the horse's working parts. Prerequisite: ANSC 168 or consent of instructor. (F, Sp)

ANSC 263	3 cr.
Advanced Jumping	

# **ANSC 264**

3 cr.

3 cr.

3 cr.

3 cr.

4 cr.

3 cr.

# Horse Management and Training

Principles of horse breeding, nutrition, management, health, evaluation, equitation and training are examined. (Special laboratory fee required) (SS)

# **ANSC 265 Riding School Operation and** Management

Business and practical aspects of operation a riding school will be examined. Techniques for teaching of hunt seat, dressage, jumping and western riding. Special laboratory fee required. (SS)

# **ANSC 266 Farrier Training**

This course investigates the art and science of shoeing the horse, including anatomy and diseases of the foot, trimming, making and fitting shoes, and corrective and pathological shoeing. Prerequisite: consent of instructor. Accelerated course. Special laboratory fee required. (Sp)

### **ANSC 267** 1 cr. Horsemanship

Students will learn principles of hunt seat, dressage, jumping and western riding. Emphasis is on the use of the aids to develop and control the movements of the performance horse. Selected topics will be on the proper care and management of the horse. Special laboratory fee required.(SS)

# **ANSC 268 Balanced Seat Applications**

Challenges students to understand the theoretical basis and practical application of the classical gymnastic exercises that test the rider's use of the aids and the horse's suppleness and obedience. It includes work on the flat and over fences. Prerequisite: ANSC 167, ANSC 168. (F, Sp)

# **ANSC 270** Internship I

An additional off-campus occupational work experience for the student which involves full-time employment with a cooperating agency or firm. Prerequisites: 30 cr. and consent of the faculty coordinator. (F, Sp, SS)

# **ANSC 271 International Internship**

An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Special course fees required. Prerequisites: 30 semester credits. (F, Sp, SS)

ANSC 289	0.5-3	cr.
Special Topics in Animal Science		

# **ANSC 301 Dairy Manufacturing I**

1 cr.

1 cr.

2 cr.

3 cr.

2-4 cr.

4 cr.

### **ANSC 302** 1 cr. **Advanced Dairy Cattle Evaluation** Advanced training in dairy cattle judging techniques. Preparation for national judging

competition. Weekend class attendance required. (F during first half of semester)

### **ANSC 304** 2 cr. **Quality Milk Production and Processing**

# **ANSC 311 Advanced Livestock and Carcss Evaluation**

This course will emphasize the skill refinements required for students to effectively participate in intercollegiate livestock judging competitions and to obtain certification meeting the requirements of various states for judging youth livestock shows. Prerequisites: ANSC 211. (Sp)

# **ANSC 313 Advanced Equine Evaluation**

Advanced training in equine evaluation techniques. Emphasis is placed on refining student's abilities to objectively evaluate and rank horses in preparation for national judging competitions. Prerequisite: ANSC 213 or consent of instructor.

# **ANSC 341 Biometrics**

# This course examines the basic concepts of statistics including measures of central tendency, measures of variation, probability distributions, significance testing, correlation, regression, and analysis of

variance. Prerequisite: MATH 146. (F, Sp) **ANSC 345** 

# **Animal Health**

This course examines the disease process and immune response in animals. Common diseases of domestic livestock are discussed with emphasis on maintaining healthy animals. Prerequisite: ANSC 111, BIOL 150. (F, Sp)

### **ANSC 346** 3 cr. **Principles of Animal Breeding**

This is a writing intensive course. The application of genetic principles to livestock improvement will be examined including elementary population genetics, phenotypic and genotypic effects of selection, selection methods, and systems of mating. Prerequisite: ANSC 257. (F,Sp)

### **ANSC 348** 3 cr. **Teaching Techniques of Riding**

Specific teaching methods directed toward the instruction of the beginningto advanced-level rider will be covered.

1 cr.

2 cr.

3 cr.

Students will assist with the instruction of Animal Science 168. Prerequisite: ANSC 167 and 168. (F)

# **ANSC 350**

**Principles of Training Horses** 

The study and application of the principles and techniques used to gentle and train the young horse under saddle. Emphasis is placed on relaxation, forward movement, willingness, and the development of soft responses to the natural aids. Prerequisites: ANSC 261 and consent of instructor.(Sp)

ANSC 351	1	cr.
<b>Techniques in Dressage</b>	and Jumping	

# **ANSC 365**

# **Poultry Production**

This course examines the selection, breeding, feeding, housing, and general management of poultry and poultry products. Prerequisites: ANSC 232, 257. (F, alternate years)

# **ANSC 366 Swine Production**

This course examines the selection, breeding, feeding, housing, and general management of swine. Prerequisites: ANSC 232,257. (Sp, alternate years)

# **ANSC 367 Beef Production**

The selection, breeding, reproduction, nutrition, and management of beef cattle are covered in this course. Prerequisites: ANSC 232,257 or consent of instructor. (F)

# **ANSC 368 Sheep Production**

The selection, breeding, reproduction, nutrition, and management of sheep are examined. Prerequisites: ANSC 232,257 or consent of instructor. (Sp, alternate years)

# **ANSC 369**

# **Equine Production**

A survey of the light horse industry in the United States, including the various breeds and registries. Current views and facts on equine nutrition, reproduction, genetics, diseases, unsoundness and parasites will be emphasized. Prerequisites: ANSC 232, 257. (F)

# **ANSC 370 Internship II**

An additional off-campus occupational work experience for the student which involves full-time employment with a cooperating agency or firm. Prerequisites: ANSC 270 and consent of the faculty coordinator.(F, Sp, SS)

# **ANSC 378** Semester Abroad

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

4 cr.

2-4 cr.

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)

ANSC 379	6 cr.
Semester Abroad	

ANSC 380		
Biomechanics	and	Kinesiology

ANSC 389	0.5-3 cr.
Special Topics in Animal Science	

# **ANSC 407 Physiology of Lactation**

### **ANSC 433** 3 cr. **Advanced Nutrition**

This is a writing intensive course. Anatomy and physiology of the ruminant and monogastric digestive tract and factors affecting nutrient digestibility will be discussed. Biochemical and physiological functions of nutrients in ruminant and monogastric animals will be compared. Course manual fee required. Prerequisites: ANSC 232, AGBI 251 or CHEM 361. (F, Sp)

# ANSC 435 **Experimental Nutrition**

# **ANSC 447**

Endocrinology Students will study the regulation of body functions by the endocrine system with emphasis on homeostasis and disease conditions. Prerequisite: BIOL 150. Accelerated course.(F)

# **ANSC 448**

# Physiology of Reproduction

A study of the reproductive processes of livestock including anatomy, endocrinology, gonadal function, fertility and factors influencing reproductive performance. Prerequisite: BIOL 150. (F, Sp)

**ANSC 449** 1 cr. **Artificial Insemination of Farm Animals** An in-depth study of the principles and mechanics of the artificial insemination of farm animals with primary emphasis on cattle. Laboratory fee required. Prerequisite: ANSC 448 or consent of instructor. Accelerated course. (Sp)

### ANSC 455 3-6 cr.

2 cr.

2 cr.

2 cr.

2 cr.

3 cr.

# **Equine Reproductive Techniques**

An in-depth study of the principles and mechanics of reproduction in the horse. The direct application of topics in manipulating the estrous cycle; pregnancy detection; management of the pre-partum mare; parturition; neonatal management; stallion behavior and handling; semen collection and evaluation; and artificial insemination. Laboratory fee required. Prerequisites: ANSC 369, ANSC 448 (COrequisite) and consent of instructor. (Sp)

### **ANSC 456** 2 cr. **Reproduction Management in Cattle**

### **ANSC 467** 3 cr.

**Feedlot Management** Beef feedlot management systems with emphasis on health and nutrition will be examined. Prerequisite: ANSC 367 or consent of instructor. (Sp)

# **ANSC 472**

Instr Applications in Equine Science

# **ANSC 485**

1 cr.

# **Seminar: Animal Science** This is a writing intensive course. A comprehensive review and discussion of recent literature in the field of animal science. Prerequisite: senior standing. Recommended that student has completed (or be currently enrolled) in a minimum of two of the following: ANSC 346,433, or 448. (F, Sp)

**ANSC 489** 0.5-3 cr. **Special Topics in Animal Science** 

# **ANSC 490**

1-3 cr.

Independent Study: Animal Science Students will conduct independent study and/or research with a staff member in the specific area of animal science. Prerequisites: junior or senior standing and consent of instructor. (F, Sp, SS)

# ANTHROPOLOGY

# **ANTH 100**

3 cr.

# Introduction to Anthropology

The course is a survey of the concepts, principles, methods and major findings of anthropology. The way social learning shapes distinctive attitudes and behavior in particular groups is examined in light of the underlying traits shared by all humans. Cultural anthropology is emphasized. (F, Sp)

# **ANTH 205**

3 cr.

**Culture and Personality** This course addresses questions of human psychology across cultures. The

2 cr.

role of culture in forming character is examined. Cross-cultural studies reveal the relationships between culture and child development, mental illness, styles of emotional expression, and other elements of personality. Prerequisites: SOCI 100 or ANTH 100. (Every two to three years)

# ANTH 211 International Children

This course covers the status of children and adolescents across the world, contrasting various societies in industrial and developing regions, including indigenous populations. Major topics covered are children and poverty, the health and disease status of children and adolescents, children in war, including cultural definitions of children's rights. Colisted as ANTH 211. Prerequisite SOCI 100 or ANTH 100 or GEOG 120. (F, Sp)

# **ANTH 221**

Global Perspectives on Women

This course covers the social, political, and health status of women across the world and examines the cultural and social structural forces which influence these positions. Topics emphasized are the global exploitation of women and girls, reproductive health and disease, literacy and education, survival sex, rape, infibulation, poverty, war, women in government, work, households, and the military. Co-listed as ANTH/WMST 221. Prerequisite: SOCI 100 or ANTH 100 or WMST 200.

# ANTH 225

Race and Ethnicity (d)

A study of the interaction of ethnic, racial, and national groups with emphasis on American society. International cases are also studied. Prerequisite: SOCI 100 or ANTH 100.

# ANTH 228

# **Native American Culture**

This course is an introduction to the anthropology of Native American cultures. It includes study of several American Indian cultures in different regions of North America. The course emphasizes the diversity of cultures among Native Americans, in the past as well as the present. Prerequisite: SOCI 100 or ANTH 100.

# **ANTH 247**

# Human and Cultural Origins

This course examines the evidence for human origins and modern human biological diversity. The course helps to dispel the idea of biological race. Prerequisite: SOCI 100 or ANTH 100. (F,Sp)

ANTH 289	0.5-3 cr.
Special Topics in Anthropology	
ANTH 318 Medical Anthropology	3 cr.

3 cr.

3 cr.

3-6 cr.

3-12 cr.

2 cr.

3 cr.

0.5-3 cr.

# ANTH 338

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

# **Global Health and Disease**

The course explores the relationships between lifestyle, health, and disease, emphasizing the importance of culture and social structure. Global and national social epidemiology (the study of disease and health in various populations), re-emergent and emergent infectious disease problems such as tuberculosis, influenza, cholera, and bovine spongiform encephalopathy, ebola, and HIV, respectively; indigenous healing, and health care delivery systems are a major focus of this course. Co-listed as ANTH 338. Prerequisite: SOCI 100 or ANTH 100. (Sp)

# ANTH 348 Faces of Culture

The full extent of the human imagination is revealed in cultural diversity. The course highlights cultural variation, human adaptability, and the skills of the anthropologist in studying and explaining cultures. Co-listed as ANTH 348. Prerequisites: SOCI 100 or ANTH 100. (F, Sp)

# ANTH 378 Semester Abroad Research

# ANTH 379 Internship in Anthropology

The internship in rithin oprogy The internship program allows students to receive university credit for supervised work in an institutional or other setting, which may be situated outside the U.S. Admission to the program requires permission of the instructor. (F, Sp, SS)

# ANTH 381

Seminar: Anthropology

# ANTH 389

# Special Topics in Anthropology

This course provides an opportunity to study a selected topic in anthropology. Sample topics include magic and witchcraft, ethnographic fiction, and cultural change amoung Native Americans. Prerequisite: ANTH 100. (when possible)

# ANTH 395 Belize Study Tour

This course requires on-campus study of Belize peoples, wildlife, and habitats followed by a spring break tour to Belize. Students are immersed in a variety of environmental settings to improve their appreciation of cultural and biological diversity. Sample rainforest activities include trekking, canoeing, cave exploration, and visits to Mayan temples. The reef component focuses on the marine environment, and includes sailing and snorkeling. There are opportunities for SCUBA certification. Licensed guides are used. Presentations are made by conservation organizations. A day trip to Tikal in Guatemala is included.

# ANTH 435 Social and Cultural Change

This course examines the causes and consequences of social change. Various approaches are introduced. Special attention is devoted to the individual's role in creating and dealing with social change. Co-listed as ANTH 435. Prerequisites: SOCI 200, 15 total credits of sociology, and junior/senior standing.(yearly)

3 cr.

1-2 cr.

3 cr.

# ANTH 489 0.5-3 cr. Special Topics in Anthropology

# ANTH 490 Readings in Anthropology

The course is designed for sociology majors or minors who wish to pursue additional anthropological readings on a topic of interest. Students must complete an application and receive departmental approval before registering. Students are limited to 2 credits per semester and a total of 4 credits. Prerequisites: 18 credits of sociology/anthropology, and major or minor in sociology. (F, Sp, SS)

# ANTH 499 1-2 cr. Independent Study: Anthropology

The course is designed for sociology majors or minors and anthropology minors who wish to pursue an anthropological topic of special interest. Students must complete an application and receive departmental approval before registering. Students are limited to 2 credits per semester and a total of 4 credits. Prerequisites: 18 credits of sociology/anthropology, and major or minor in sociology. (F, Sp, SS)

# ART

# ART 100 Introduction to Art

An introductory art appreciation course for non-art majors. Students will be introduced to the visual analysis of art works and the historical and cultural context of art forms. (F,Sp)

# ART 121 3 cr. Design Foundation

An investigation of the basic elements and principles of two-dimensional design. Students use the computer to investigate fundamentals of design (F,Sp)

138

# ART 131 Drawing I

The course is a foundation drawing course that explores a variety of ideas, techniques and material with a perceptual focus; drawing as a fine art and a basis for structure. Materials fee is required. (F)

# ART 132 Drawing II

Studio work in drawing with a variety of materials, techniques, and ideas. The class is conceptually based with an involvement and emphasis on structure, ideas and process. Materials fee is required. (Sp)

# ART 206 Printmaking for Non-Majors

# ART 210 Women in the Arts

# ART 211

Western Art to 1500

Students will study the art of prehistoric humans and the civilizations of ancient Egypt, Mesopotamia, Crete, Mycenae, Greece, Rome, Early Christianity, the Byzantine Empire, the Celts, the Germanic peoples, the Romanesque and Gothic styles, and early Renaissance by means of slide lectures and museum visits. (F)

# ART 212

# Art History Since 1500

Students will study the architecture, sculpture, and painting of the Italian High Renaissance and Northern Renaissance, the Baroque and Rococo styles, Neo-Classicism, Realism, Romanticism, Impressionism, Post Impressionism, Expressionism, Cubism, Abstraction and the many styles of the twentieth century by means of slide lectures and museum visits. (Sp)

# ART 215 History of Fibers

# ART 225

Advertising Design I

The course is an introduction to advertising design with an emphasis on understanding the processes and procedures used in desktop publishing. Students will be involved with designing and laying out projects on the computer for print. (F, Sp)

# ART 226

# Introduction to Fibers

An introduction to the techniques and materials used in fibers, including weaving, surface design, dyeing, felt-making and sculptural forms. Historical and cultural perspectives including personal expression in the arts will be introduced in this course. Prerequisite: Art major, minor or

**3 cr.** permission from the instructor. Materials fee is required. (F, Sp)

# ART 227 Introduction to Clay

3 cr.

2 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

An exploration of ceramic materials (clay and glazes) and processes with an introduction to hand and wheel forming of clay, decorating, glazing, firing. Historical and cultural perspectives including personal expression in the arts will be introduced in this course. Materials fee is required. (F, Sp)

3 cr.

3 cr.

# ART 228 Introduction to Metals

An introduction to the basic skills of working sheet metal, wire and cast metal with emphasis on their creative possibilities in jewelry making. Historical and cultural perspectives including personal expression in the arts will be introduced in this course. Materials fee is required. (F, Sp)

# ART 229 3 cr. Introduction to Glass

An introduction to the material and techniques for using glass as a means of personal expression. Processes include glass blowing, stained glass, carving, fusing and casting. Historical and cultural perspectives including personal expression in the arts will be introduced in this course. Materials fee is required. (F, Sp)

# ART 235 3 cr. Introduction to Black and White Photography

An introduction to black and white photography as a means of visual communication and personal expression. An exploration of camera, film, and paper processes relating to the creation and evaluation of photographic images. Material fee is required. (F, Sp)

# ART 236 3 cr. Introduction to Printmaking

An introductory exploration of creative possibilities in the basic materials and techniques used in several printmaking mediums: relief, intaglio, monotype, collograph. Lectures will explore historical and cultural perspectives related to printmaking. Materials fee is required. (F,Sp)

ART 2373 cr.Introduction to Sculpture

# ART 238 Introduction to Painting

The course is an introduction to painting concepts and techniques. Students learn to work with line, form, texture, and composition, while working with color and experimenting with various painting

3 cr.

techniques. Short lectures will explore the historical and cultural context of painting. Materials fee is required. (F, Sp)

ART 239 Introduction to Video	3 cr.
ART 240 Color Theory	3 cr.

# ART 250 2 cr. Child Art A study of the child in relation to the

growth and development of expression in art from pre-school through elementary school as well as art education theory and practices. Materials fee is required. Prerequisite: ART 100 (F, Sp)

# ART 251 Middle and Secondary Art

2 cr.

0.5-3 cr.

Preparation to teach art at the middle/ secondary level including: history of art education, aesthetic development of the transadolescent and adolescent, state and national art standards, art curriculum and assessment development, approaches to 6-12 art media instruction, creative process and management in the classroom. Prerequisite: ART 250, TED 211 or 212 (F)

# ART 289 Special Topics in Art

**ART 303** 

# 3 cr.

Advertising Design II The course is a continuing study of basic graphic design techniques, theory and practices used in commercial graphic arts. Additional practical experience will be offered students in developing a portfolio of work related to desktop publishing. Prerequisite: ART 225 or consent of instructor. (F, Sp)

ART 306	2 cr.
Scientific Illustration	

ART 307	3 cr.
<b>Computer Graphics as</b>	Visual Expression

ART 309	1 cr.
Senior Exhibition	

A senior exhibition is required for all BFA students and strongly recommended for Broad Area Art Majors. Students will learn theories and practices employed in planning, designing, and preparing museum and gallery exhibitions. Students will also develop an understanding for equipment, time, and space considerations in displaying artwork. Prerequisite: Senior standing art major or minor and consent of instructor. (F,Sp) **ART 310** 

# Philosophy and History of Visual Art

The course is a study of the arts in America during the colonial, revolutionary, federal and early national periods, including architecture, painting, sculpture, furniture and minor arts, by means of slide lectures and museum visits.

# **ART 311**

# American Art to 1865

The course is a study of the arts in America during the colonial, revolutionary, federal and early national periods, including architecture, painting, sculpture, furniture and minor arts, by means of slide lectures and museum visits. (F, alternate years)

# **ART 312**

# **American Art Since 1865**

The course is a study of the architecture, painting, sculpture and minor arts in America from the end of the Civil War to the present. Analyzes how history and intellectual developments influenced the various styles of art from the landscapes of the expanding young nation to the abstract expressionism and dramatic skyscrapers of today. (Sp, alternate years)

ART 313	3
Art and Architecture of the Upper	
Midwest	

# **ART 314**

Art of China, Japan and India

The course is a study of the arts of China, India, and Japan from prehistoric times to the present, including architecture, sculpture, painting, ceramics, metals, textiles, and printmaking. Religious and philosophical ideas are discussed in relation to art, particularly Buddhism and Hinduism. (SP, alternate years)

ART 315 History of Graphic Design	3 cr.
ART 316 American Indian Art	3 cr.
ART 317 History of Russian Art	3 cr.
ART 318	2 cr.

# Latin American Art

Students will study the arts of Mexico, Central and South America from prehistoric times to the present, including great pre-Columbian civilizations in Mexico and Peru; the colonial period with its mixture of indigenous and imported European styles; the 19th century; and the rich artistic life of the 20th century, including the Mexican muralists, women artists, and contemporary work in all countries of South America. (F, alternate years)

# ART 319

3 cr.

3 cr.

3 cr.

cr.

2 cr.

Art and Architecture Since 1950

# **ART 320 Drawing from the Figure**

Students work from live models using traditional and mixed drawing media. Class lecture and discussion examines the use of the figure in art, anatomy, space, and linear, value and gestural studies. Emphasis is on both skill and expression. This course may be repeated for credit with increasing emphasis on individual direction. Prerequisite: ART 131, junior standing or permission from instructor. Costs: model fee is required. (Sp)

# **ART 326** Studio - Fibers

An advanced investigation of fiber arts including weaving, dyeing, surface design, felt-making, mixed media and sculptural forms. Emphasis is on technical development, creative expression and aesthetic judgment. Materials fee is required. Prerequisites: ART 226 or consent of instructor. (F, Sp)

# **ART 327** Studio - Clay

Advanced investigation of ceramic materials as media of expression; further development of manipulative skills, ceramic technology and personal modes of expression. Materials fee is required. Prerequisites: ART 227 or consent of instructor. (F, Sp)

# **ART 328** Studio - Metals

Advanced investigation of non-ferrous metal working processes as they apply to jewelry, hollow-ware and flatware with emphasis on the creative use of the medium. Materials fee is required. Prerequisites: ART 228 and consent of instructor. (F, Sp)

### **ART 329** Studio - Glass

A comprehensive course designed to meet the individual student's quest for knowledge, skill and personal expression through the use of glass and other material utilizing a variety of processes. Materials fee is required. Prerequisites: ART 229 or consent of instructor. (F, Sp)

# **ART 335 Studio - Photography**

Continued investigation of photography as a creative medium for self-expression through the introduction of additional darkroom and/or digital techniques. Emphasis on preparation of personal work for portfolio, competition, and exhibition.

Prerequisite: ART 235 or consent of instructor. Materials fee is required. (F, Sp)

### **ART 336** 2-3 cr. **Studio - Printmaking**

Students will experience an individualized intermediate and advanced investigation in the printmaking processes of intaglio, lithography, relief and photo-printmaking techniques. An emphasis is placed on developing technical knowledge, strengthening a personal portfolio and developing aesthetic judgment. Prerequisites: ART 236 or consent of instructor. Costs: Material fee is required. (F, Sp)

ART 337	2-3 cr.
Studio - Sculpture	

# 2-3 cr. **Studio - Painting**

Intermediate advanced study of painting as creative expression, including oil paint, acrylic and other water base media. Experimental techniques will be introduced. Developing technical skills as well as setting a personal direction will be stressed. Materials fee is required. Prerequisites: ART 238 or consent of instructor. (F, Sp)

ART 339 Studio - Video Art	2-3 cr.
ART 351 Child Art	2 cr.

### **ART 376** 3 cr. **Experience Greece: Culture Past and** Present

Students participating in the Greece Tour receive of general elective credit in either English, art or geography. Participating in the Greece Tour Orientation Seminar (10 hours), offered during the spring semester, is required. Co-listed in English and geography.(Sp, SS)

### 2-3 cr. **ART 378** 3-6 cr. Semester Abroad Research

The research component of the A semester of independent study and research in a European country. Taken in conjunction with international Studies 377/577. Prerequisites: Participation in Spring Semester abroad orientation seminar: 2.25 GPA; junior or senior standing (Spring Semester orientation followed by Fall Semester travel)

### **ART 379** 3-10 cr. Art Internship

The internship is designed to allow the student to earn credits through practical field experiences in art. Acceptable experiences must be of a professional level. For example, acceptable experiences

3 cr.

3 cr.

2-3 cr.

2-3 cr.

2-3 cr.

2-3 cr.

**ART 338** 

might be museum, educational or business related internships; internships in other alternative educational situations; related artist or designer experience with architects, urban design centers, display and advertising centers; apprenticeship to established artists; professional studio experience as an independent professional artist. Prerequisites: previous course work in related areas with approval of faculty department chairperson and the dean, College of Arts and Sciences. (F, Sp)

# ART 382 Moroccan Art Study Tour

This program provides an opportunity for students to study Moroccan art, archaeology, architecture, and culture. There are three pre-trip lecture sessions providing academic background; enabling students to understand and analyze the nature of pre- and post-Islamic Morocco. Two post-trip sessions will evaluate student power point presentations; include student interviews, and exam.

# ART 383

Journey to Egypt

This international study program will provide an opportunity for students to study Egyptian art, archaeology, architecture and history. Modern culture, religion, politics, society, economy and environment will also be examined. Two pre-trip seminars will be held in the fall, and a post-trip interview will be conducted upon return.

ART 389	0.5-3 cr.
Special Topics in Art	

# ART 407

Introduction to Art Therapy

This course covers an overview of the history, philosophical foundations and major theoretical trends in the field of art therapy: the use of art for non-verbal communication, the enhancement of wellbeing, and the remediation of dysfunctional behavior. Students will gain experience in the process of art therapy and its application to a variety of patient client populations. Prerequisites: junior standing. (irregularly)

ART 408 Art Therapy Group Process	3 cr.
ART 409 Workshop Art Therapy	2 cr.
ART 415 Business for Artists	2 cr.
ART 451 Art Exp for Elementary Program	3 cr.

# ART 485 Art Seminar

Art Seminar focuses on the professional aspects of being an artist and/or art educator. Each student will create a personal slide set, slide lecture, resume, artist's statement, cover letter, and small public exhibit of their work including poster and press release. Prerequisites: Senior Level Art major or minor or have instructor consent. (F, Sp)

# ART 489 Special Topics in Art

3 cr.

3 cr.

3 cr.

The topics explored in this course vary each term to address contemporary and timely issues. Specific course descriptions for each term may be available on the Outreach and Graduate Studies Web site at http://www. uwrf.edu/ogs on the Credit Courses page.

# ART 490 1-3 cr. Readings in Art History

Students will perform an in-depth study of a special problem or topic in art history. One or more papers will always be expected as a result of this special study. Prerequisites: consent of instructor and filling out form in Art Office before registration. (F, Sp)

# ART 499 1-3 cr. Independent Study

The course entails independent study designed by the student as an exploration of an area, medium or experimental problem that is not presently within the scope of departmental offerings. Prerequisites: art majors or minors only, sophomore standing or above, consent of the faculty supervisor, filling out form and obtaining signatures before registration. (F, Sp)

# **BROAD FIELD SOCIAL STUDIES**

# BFSS 200 3 cr. Introduction to Social Science for Teachers

An introduction to Social Science for students preparing to teach Social Studies at the secondary or elementary level. Empahais on methodology, interpretation of data, and in the general content areas of social science. Prerequisites: BFSS Major or Social Science minor (Elementary Education Certification). (Sp)

# BFSS 400 4 cr. Curriculum Development for Social Studies

The course covers issues relating to the social science disciplines and teaching social studies in grades 6-12. The focus is on learning to develop and teach contentcentered social studies courses. Student swill develop the ability to teach social sciences as discipline-specific elements and as interdisciplinary elements of the curriculum. Prerequisites: Admitted to Teacher Education. (F)

# BIOLOGY

# BIOL 100

# Introduction to Biology

This course is designed to acquaint nonscience majors with basic concepts and principles in biology. The focus is on those aspects essential to scientific literacy. The laboratory component of the course provides students with experience in the process of biological science through experimentation. Biology majors and other students planning to take subsequent biology courses should take BIOL 150 instead. (F, Sp, SS)

# BIOL 101 Concepts in Biology

3 cr.

1 cr.

3 cr.

This course is designed for non-science majors who need to understand the central themes of biology but do not require a biology laboratory. Biology majors and other students planning to take subsequent biology courses should take BIOL 150 instead. Students may not receive credit for both BIOL 100 and BIOL 101. (F, Sp, SS, W)

# BIOL 110

# Freshman Colloquium

This course should be taken during a biology major's first semester at UW-RF. The course includes presentations by staff members from biology, career services and the library. Students will write a career paper in world wide web page format, based on a search of internet resources, library resources, and an interview with a professional in the chosen field. This web page document will be the first entry in a professional portfolio that each biology major will maintain throughout his or her undergraduate career. Students will learn computer techniques necessary to compile this portfolio and post it on the world wide web. During their senior year, the completed portfolio will be presented in BIOL 410, Senior Colloquium. (F)

# BIOL 150 General Biology

3 cr.

This course is designed for biology majors and minors and other students majoring in a biological scientific discipline who will take additional biology courses. It serves as a general introduction to fundamental concepts and principles of biology: evolution, classification, ecology, basic chemistry, cell structure and function, energy transformations, cellular reproduction, genetics and molecular

0.5-3 cr.

biology. The laboratory component of the course provides students with experience in the process of biological science through experimentation, inquiry-based labs, and specific laboratory techniques. (F, Sp)

# **BIOL 210 General Botany**

The course surveys the organisms traditionally regarded as plants (cyanobacteria, algae, fungi, seedless vascular plants) as well as gymnosperms and angiosperms. This course also provides a foundation in plant carbon metabolism, plant respiration, water relations and plant molecular biology. Special course fee is required. Prerequisite: BIOL150. (F, Sp)

# **BIOL 230 General Zoology**

This course surveys the protozoan protists and traditional animals in a phylogenetic format. Emphasis is on taxonomy, morphology, physiology, ecology, and evolution of these organisms. Special course fee is required. Prerequisite: BIOL 150. (F,Sp)

# **BIOL 235**

**Comparative Anatomy** 

The course includes vertebrate evolution, taxonomy, structure and function with emphasis on dissection and comparative study of representative vertebrate types. Special course fee is required. Prerequisite: BIOL 230. (Sp)

# **BIOL 240**

**Cell and Molecular Biology** 

The course examines the structural organization and functional roles of cellular components, intercellular communication, regulation of cellular activities and the laboratory techniques used to study cells. The course emphasizes molecular aspects of eukaryotic cells. Special course fee is required. Prerequisites: BIOL 150; CHEM 121, 122 are recommended. (F,Sp)

# **BIOL 243**

# 2 cr. Introduction to Biological Greek and Latin

This course is designed to provide the student with the principles of word structure in technical terminology. Emphasis is on the meanings of bases, prefixes, and suffixes of scientific, especially biological and medical, importance. This is a web-based course. Prerequisite: BIOL 100 or 150. (F, Sp)

# **BIOL 253 Human Biology**

This course provides an overview of human biology for nonscience majors. Coverage is focused on the human life cycle to include

reproduction and development, genetics, and aging. Aspects of human disease such as cancer, AIDS, and addiction are considered. Biological topics are placed in a social and ethical context. Does not count toward Biology major or minor. Prerequisite: BIOL 100 or 150. (F)

0.5-3 cr.

2 cr.

2 cr.

3 cr.

# **BIOL 289 Special Topics in Biology**

3 cr.

3 cr.

4 cr.

3 cr.

3 cr.

# **BIOL 295** Lab Research Experience

Students will learn skills necessary for laboratory research in biology. These skills will include experiment design, reagent preparation, data analysis, maintaining a laboratory notebook, presentation of research results, and specific laboratory techniques. Prerequisites: BIOL 150, CHEM 121,116. (F, S)

# **BIOL 296 Field Research Experience**

Students will participate in a field biology research project and learn specific field biology skills and techniques. These skills will include experiment design, data collection, recording and analysis, and written and oral presentation of research results. Prerequisites: BIOL 210 or 230. (F)

# **BIOL 300 Environmental Education**

This course is designed to meet the certification requirement for teacher education candidates as specified by the state of Wisconsin Department of Public Instruction Environmental Education rule. The course will investigate the following environmental issues: the ecosystem, population, food production, energy, natural resource depletion, land use and misuse, and sources of environmental impact. Teaching methodologies will be presented to incorporate environmental content into the curriculum. Field trips required. Colisted as GEOG 300/500. Special course fee required. Prerequisites: Junior standing required and TED 211 or 212 or consent of instructor. (F, Sp, SS)

# **BIOL 305**

3 cr.

**Applications in Molecular Biology** This course provides a foundation in the basic concepts and principles of modern molecular biology. It is based on study of the processes of DNA replication, transcription and translation; basic molecular tools and techniques; and current topics approached from a problemposing and problem-solving perspective. Prerequisites: BIOL 240 and BIOL 210 or 230. (Sp, alternte years)

# **BIOL 307 Human Heredity**

The course will be an investigation of principles of transmission and expression of genetic information in humans. Role of hereditary factors in development of normal and pathologic human traits will be examined along with discussion of recent and potential advances in genetics research, their implication for the future of the human species and ethical considerations regarding their implementation. Prerequisite: BIOL 100 or 150.(F, alternate years)

# **BIOL 310**

**Identification of Plants** 

This course incorporates the basic principles of plant systematics: the study of the diversity of plants and their identification, naming, classification and evolution. Included in this course are plant groups-algae to flowering plants. Students will be expected to make identifications to specified taxonomic levels and relate organisms to ecology and economy of nature and man as well. Special course fee is required. Prerequisite: BIOL 210. (F,alternate years)

# **BIOL 314 Plant Pathology**

This course is an introduction to the study of plant diseases. Students will study the general characteristics, classification, life cycles and control measures of representative groups of plant pathogens. The course also explores the epidemiology and genetics of plant disease as well as the impact of biotechnology on the field of plant pathology. Special course fee is required. Prerequisite: BIOL 150, and BIOL 210 or CROP/HORT 161. (F)

# **BIOL 320 Plant Physiology**

This course examines the water relations of plants and plant cells, acquisition of inorganic nutrients, energy transduction and carbon metabolism, regulation of plant development, and physiology of plants under stress. The labs focus on plant molecular biology techniques. Prerequisites: BIOL 210, 240, and a course in chemistry. Special course fee is required. (Sp, alternate years)

BIOL 321	1 cr.
Ecosystem Biology Lab	
RIOL 323	3 cr

BIOL 323	3 cr.
Ecosystem Biology	

# **BIOL 324** Microbiology

Students will examine morphology, metabolism and systematic relationships of bacteria and other microorganisms and

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3 cr.

3 cr.

3 cr.

their role in agriculture, industry, sanitation and disease. Microbial genetics and the role of microbes in genetic engineering will be discussed. Prerequisite: BIOL 150; BIOL 240 and CHEM 121,122 are recommended. Special course fee is required. (F,Sp)

3 cr.

3 cr.

3 cr.

4 cr.

4 cr.

4 cr.

4 cr.

# BIOL 330 Identification of Animals

# BIOL 333 Entomology

This course is based on the study of insect structure, development, taxonomy, and human-arthropod interactions. The lab focuses on principles of sampling and identification of insects. Prerequisite: BIOL150. Special course fee is required. Students should arrange to receive collecting instructions and check out an insect net for the summer prior to taking the class. (F)

# BIOL 340 Human Physiology

# BIOL 341

Anatomy and Physiology I

This course includes the anatomical components and physiological mechanisms of organ systems (skeletal, articular, muscular, nervous, sensory, endocrine) of the human organism. Importance is placed on integration of anatomy and physiology, interrelationships of systems, and homeostatic control. The course will provide a solid foundation for students interested in pursuing a career in the medical sciences and biological research. Prerequisite: BIOL 230 (F)

# **BIOL 342**

Anatomy and Physiology II

This course includes the anatomical components and physiological mechanisms of organ systems (cardiovascular, respiratory, digestive, urinary, reproductive) of the human organism. Importance is placed on integration of anatomy and physiology, interrelationships of systems, and homeostatic control. The course will provide a solid foundation for students interested in pursuing a career in the medical sciences and biological research. Prerequisite: BIO 341 (Sp)

# BIOL 343 Microtechnique and Elec Mic

# BIOL 344 Wildlife Biology

This course covers a variety of topics important to wildlife professionals, with emphasis on the management of wetlands, grassland birds, and white-tailed deer in western Wisconsin. Additional topics include habitat design, hunting, predation, and law enforcement. Students are required to participate in regular class discussion of popular and scientific articles relating to current wildlife issues. Working in teams, students will formulate and present management plans published as World Wide Web pages. Guest lectures will be presented by wildlife professionals from the Wisconsin Department of Natural Resources. Special course fee is required. Prerequisites: BIOL 150; at least one course in statistics is recommended.

# BIOL 345 Immunology

This course covers the basic features of the mammalian immune system, including antigen-antibody interactions, cellular immunity, immunogenetics and immune disorders. The lab provides experience in immunological techniques and data analysis used in research and clinical diagnosis. Special course fee is required. Prerquisite: BIOL 240. (Sp)

# BIOL 350 Genetics and Evolution

This is a writing intensive course. Principles of Mendelian, quantitative and population genetics in sexually reproducing organisms will be studied along with molecular genetics of prokaryotes and eukaryotes, genetic mechanisms of evolution and chromosome structure and organization. Prerequisite: BIOL 240. (F, Sp)

# BIOL 353 Histology

In this course students will be intoduced to the microscopic anatomy of the four primary tissue types and how they are organized into organ systems. The course will emphasize the structural and functional relationships of tissues and present histology in relation to principles of physiology, biochemistry and molecular biology. In addition to the traditional microscopy-based lab, a computer-based interactive program for microscopic anatomy will be employed. This course is designed to give students interested in pursuing medical, veterinary and research careers a solid foundation in modern histology. Special course fee is required. Prerequisite: BIOL 240 and 341; CHEM 361 recommended. (Sp)

# BIOL 354 Freshwater Biology

The structure and function of freshwater ecosystems, with emphasis on community ecology of both standing and flowing waters, and the application of these principles to proper use of aquatic resources will be examined. Prerequisites: BIOL 150, 210 or 230. (F, alternate years)

# BIOL 355 Environmental Law

The course contains an overview of public and private regulations affecting the environment, including policy considerations behind environmental legislation and the resulting legislative and administrative acts which implement that policy. Regulation at the federal, state and local levels is covered. Included are consideration of the National Environmental Policy Act, Clean Air Act, Federal Water Pollution Control Act, Toxic Substances Control Act and other significant legislation. Cross-listed as POLS 355. Prerequisites: POLS 114, and BIOL 100 or 150, or consent of instructor. (F, alternate years)

# BIOL 360 Ecology

This is a writing intensive course. Students will examine structure and function of ecosystems along with the interactions of organisms and their environment. Special course fee is required. Prerequisite: BIOL 150 and 210 or 230. (F, Sp)

# BIOL 3632 cr.Tech in Biol Photography

# BIOL 378 Semester Abroad Research

3-6 cr.

3 cr.

The research component of the Semester Abroad program. A semester of directed research in a European country. Taken in conjunction with INTS 377/577. Prerequisites: participation in the Spring Semester Abroad orientation seminar; 2.25 GPA; junior or senior standing. (F)

# BIOL 379 3-6 cr. Internship

Practical work experience in laboratory, field or professional areas of biology will be gained by students. Internship duties and responsibilities will be tailored to the needs of the sponsoring agency and the background of the student. Prerequisites: junior or senior standing, suitable academic background to meet needs of sponsoring agency. Approval of department and the dean, College of Arts and Sciences, is required. (F, Sp, SS)

BIOL 389 Special Topics in Biology 0.5-3 cr.

# BIOL 410 Senior Colloquium

1 cr.

This class is designed to further prepare biology students for entry into the job market and/or graduate and professional schools. Students will complete and present the academic portfolios they have compiled through their undergraduate careers. The portfolio will be presented in

3 cr.

4 cr.

3 cr.

both traditional and world wide web page electronic formats. This course will provide students the opportunity to experience mock interviews and develop resume' writing and presentation skills useful in job searching and other post-graduate situations. Students will complete an exit questionnaire. Prerequisite: senior standing. (F,Sp)

BIOL 411 Environmental Analysis I	3 cr.
BIOL 413 Environmental Analysis II	3 cr.
BIOL 423 Parasitology	3 cr.

# **BIOL 434** Icthvology

The course covers anatomy, taxonomy, physiology, behavior and ecology of fishes, with emphasis on local species and an introduction to field techniques used in fisheries management. Prerequisite: BIOL230. (Sp, alternate years)

# **BIOL 444** Ornithology

This course includes information on the anatomy, physiology, behavior, and status of midwestern birds, with emphasis on field identification by visual sightings and song. Students will conduct independent field studies and analyze their data using appropriate statistical techniques, then publish and present their results as world wide web pages. Students are expected to participate in class discussion of popular and scientific articles relating to current avian issues. Special course fee is required. Prerequisite: BIOL 230. At least one course in statistics is recommended. (Sp)

# **BIOL 451 Molecular Biology**

This course provides students with theoretical and laboratory experience in recombinant DNA techniques, genetic engineering and other molecular biology methods applied in biotechnology industry and research. Required for biotechnology majors. Laboratory notebook and safety goggles required. Special course fee is required. Prerequisite: BIOL 240, 324, and 350; CHEM 362 recommended. (F)

# **BIOL 453** Virology

The molecular biology of viral structure and function, host-virus relationships and viral dissemination will be examined. The role of viruses in diseases of humans, animals and plants will also be studied along with laboratory techniques used in their study. Special course fee is required. Prerequisites: BIOL 240, 324. (F)

BIOL 454	
Mammalogy	

# **BIOL 463 Animal Cell Culture**

Students will examine the theory and practice of animal cell culture and will develop laboratory skills in isolating and growing cultured animal cells, as well as microscopic observation and biochemical and cytological analysis of cultured cells. Special course fee is required. Prerequisites: BIOL 240, 324. (Sp, alternate years)

# **BIOL 464** Vertebrate Embryology

**BIOL 471** Lab Experiences

3 cr.

3 cr.

4 cr.

3 cr.

Students will gain practical experience in the preparation, execution and instruction of laboratories for introductory courses in the biology curriculum. Prerequisites: biology major or minor, junior or senior standing. (F, Sp)

# **BIOL 481** Seminar

The course includes student presentations and discussion of selected topics in biology based on examination of current research literature. Prerequisite: senior or graduate standing. (F,Sp)

# **BIOL 489 Special Topics in Biology**

**BIOL 495 Undergraduate Research** 

Students enrolled in this course will work on a research project with a faculty member in the biology department. Students will meet each week to report on their progress, and will present their results at the end of the semester. Prerequisites: BIOL 295 or 296 and consent of instructor. (F, Sp)

# **BIOL 499**

**Independent Study** 

# Students will perform individual study of a topic or problem involving laboratory, field or library research under supervision of faculty member; a written report is required. Prerequisite: approval of supervising faculty member prior to registration. (F, Sp, SS)

# BIOTECHNOLOGY

**BIOT 289** 0.5-3 cr. Special Topics in Biotechnology Biology

0.5-3 cr. **BIOT 389** Special Topics in Biotechnology Biology

# **BIOT 480**

# **Biotechnology Seminar**

This course is primarily intended for biotechnology majors in their senior year. Students are required to lead a discussion of a recently published article from a refereed scientific journal and to research a specialized area of interest in any area of biotechnology and then report their results in a departmental seminar. Students may elect to do either library or laboratory research. Prerequisites: senior standing and consent of instructor. (F, Sp)

**BIOT 489** 0.5-3 cr. Special Topics in Biotechnology Biology

# **BUSINESS LAW**

# **BLAW 265**

The course begins with an introduction to the U.S. legal system and basic principles of law, and examines in detail the law of torts, and contract/sales. Prerequisite: sophomore standing. (F, Sp)

### **BLAW 266** 3 cr. **Business Law II**

This course examines the law of business organizations and employment. Specific topics include agency, partnerships and corporations. Prerequisite: BLAW 265. (F, Sp)

BLAW 289	0.5-3 cr.
Special Topics in Business Law	

### **BLAW 354** 3 cr. Women and the Law

The course is designed as a survey of many areas of law which have made distinctions between the sexes, including employment, family, reproduction, education and criminal justice. The focus is on legal issues concerning sex discrimination against both women and men. Prerequisite: upper class standing. Co-listed as POLS 354. (F or Sp)

# **BLAW 378** Semester Abroad Research

0.5-3 cr.

6 cr.

# **BLAW 389** Special Topics in Business Law

The study of topical issues in business law. Sample topics include corporate crime, sexual harassment, international legal environment of business, and practical applications of business law. Prerequisite: BLAW 265 or consent of instructor. Some topics may have additional prerequisites. (not offered on a yearly basis.)

BLAW 489	0.5-3 cr.
Special Topics in Business Law	

3 cr.

3 cr.

3 cr.

# 3 cr. 1 cr.

1 cr.

0.5-3 cr.

3 cr.

1-3 cr.

**Business Law I** 

### **BLAW 499** 1-3 cr. **Independent Study**

1-3 cr.

1 cr.

1 cr.

1 cr.

Independent study is an opportunity for upper class students to select a project in an area of business and work independently with an assigned professor. Open only to accounting and business administration majors. Prerequisites: a 2.5 GPA in accounting and business courses, upper class standing and consent of department chair. (F, Sp, SS)

**BLAW 789** 0.5-3 cr. Special Topics in Business Law

# **COLLEGE OF BUSINESS AND ECONOMICS**

# **CBE 100**

# **Orientation to the College of Business** and Economics

This course introduces freshmen to the University's support services and to the majors and minors offered in the College of Business and Economics. Students develop a four-year plan for graduation, explore a career, begin a resume/portfolio, and learn the processes for registration and schedule changes.(F)

# **CBE 200**

# **Professional Development I**

Sophomore standing in CBE, or permission of instructor in CBE. First of two professional development classes. Focus is on developing a student's knowledge, ethics, etiquette and organization skills.

### **CBE 289** 1-3 cr. Special Topics in Business and **Economics**

# **CBE 300**

# **Professional Development II**

Junior standing in CBE, or permission of instructor. This course complemets one's major by helping students develop the competencies and skills needed to be a successful member of an organizaion. Topics include ethics, networking, mentors, writing, personal appearance, and negotiating.

# **CBE 370**

# 1-3 cr. **International Study Tour for Business** and Economics

This course is designed to acquaint participants with the history, politics, culture, business and economic environment of a foreign country. The course involves directed readings, lecture presentations, and tours of selected local and international businesses and sites that are of geographical, cultural, historical, economic, and commercial significance in the country. The students are required to participate in orientation sessions, attend lecture presentations, maintain an academic journal during the tour and to write a research paper. Prerequisites: Sophomore standing or higher. Offered upon request.

### **CBE 389** 1-3 cr. Special Topics in Business and Economics

**CBE 489** 1-3 cr. Special Topics in Business and **Economics** 

# CHEMISTRY

# **CHEM 100**

Modern Alchemy Student will look at the world from a chemical perspective, learning basic chemistry principles while delving into relevant topics such as fuels, atmospheric chemistry, foods, polymers, water chemistry, and chemicals in the home. Students taking this course may not receive credit for CHEM 101, and this course is not open to students who have already received credit fro CHEM 101, 120 or 121. (F, Sp)

### **CHEM 101** 3 cr. **Elementary Principles Chemistry**

This course is designed primarily for non-science education majors interested in obtaining a knowledge of chemistry as an experimental science. Emphasis will be placed on introducing future teachers to the tools, principles, and practical applications of chemistry. Students taking this course may not receive credit for CHEM 100, 120, or 121, and this course is not open to students who have already received credit for CHEM 100, 120, or 121. Safety goggles, calculator and laboratory manual (special course fee) required. (F, Sp)

### **CHEM 120** 6 cr. Introduction to General Chemistry

This course considers chemical formulas, equations, energy changes, atomic and molecular structures, bonding, states of matter and solutions. The lab experiments illustrate chemical principles and introduce the student to synthetic and analytical techniques. Safe handling of chemicals is emphasized. Safety goggles, scientific calculator and laboratory manual (special course fee) are required. This course is required for students who have not taken or who have received a grade lower than a C in high school chemistry.A Upon successful completion, students can enroll in CHEM 122, and/or CHEM 230. Corequisites: MATH 146, 147, 149, or 166.

# **CHEM 121**

# General Chemistry I

This introductory course in the sequence CHEM 121 and 122 is designed for students desiring one or more years of chemistry. Topics covered include chemical formulas and equations, chemical reactions and energy, atomic and molecular structure, safe handling of chemicals and synthetic analytical technique. Three hours of lecture, one hour discussion, and three hours of lab per week. Scientific calculator, safety goggles and laboratory manual (special course fee) required. Prerequisite: High school chemistry. Pre- or corequisite: MATH 146 or comparable proficiency as demonstrated by ACT Math or UW System Math Placement Test scores. (F, Sp)

# **CHEM 122 General Chemistry II**

3 cr.

5 cr.

This course is a continuation of both CHEM 120 and 121. Topics include chemical kinetics and equilibrium, acid base chemistry, solubility, thermodynamics, electrochemistry, safe handling of chemicals and synthetic and analytical techniques. Three hours of lecture, one hour of discussion and three hours of lab work per week. Scientific calculator, safety goggles and laboratory manual (special course fee) required. Prerequisite: A grade of C or better in CHEM 120 or 121. (F, Sp)

# **CHEM 195**

# 0.5-0.5 cr.

# Freshman Seminar I This course, with CHEM 196, is intended to provide a forum in which first- and secondyear students interested in chemistryrelated sciences can become familiar with opportunities within the department and within the field of chemistry as a career. (F)

# **CHEM 196**

0.5-0.5 cr.

Freshman Seminar II This course, with CHEM 195, is intended to provide a forum in which first- and second- vear students interested in chemistry-related sciences can become familiar with opportunities within the department and within the field of chemistry as a career. (Sp)

# **CHEM 200**

3 cr.

# **Chemistry and Environment**

A citizen's guide to chemical problems in preserving a clean air, water and land environment. Sources, harmful effects, and abatement procedures are studied for chemical contaminants which result from commercial, industrial, agricultural, and energy production processes. Designed to meet liberal arts requirements. Prerequisite: CHEM 100 or high school chemistry. (F,Sp)

# **CHEM 210**

# **Topics in Consumer Chemistry**

A chemistry course for students of business, the arts, humanities, and social sciences that emphasizes the application of chemical principles to the choice and use of household chemicals, over the counter drugs and cosmetics. Designed to meet liberal arts requirements. Not a suitable prerequisite for professional chemistry courses. Prerequisite: CHEM 100 or high school chemistry. (F, Sp)

# CHEM 220 Chemistry of Life

A biochemistry course for students of the arts, humanities, and social sciences. A citizen's guide to the important biochemical processes that occur in the human body. Designed to meet liberal arts requirements. Not a suitable prerequisite for professional chemistry courses. Prerequisite: CHEM 100 or high school chemistry. (F,Sp)

# **CHEM 230**

**General Organic Chemistry** 

For those desiring only one semester of organic chemistry. Includes some chemistry of acids and bases and solutions. Not open to those with credit in CHEM 231. Prerequisites: A grade of C or better in CHEM 120 or 121. (F, Sp)

# CHEM 231 Organic Chemistry I

The course is an introduction to the study of carbon-containing compounds. Basic principles of atomic orbital hybridization, bonding, acid-base definitions and mechanistic drawings are reviewed. Naming of different functional groups and their infrared spectroscopic characteristics are introduced. Other topics include stereochemistry, conformations of cyclic alkanes, ionic substitution and elimination reactions of alkyl halides and addition reactions to alkenes. Pre- or corequisite: CHEM 122. (F)

# CHEM 232 Organic Chemistry II

The course is a continuation of CHEM 231. Nuclear magnetic resonance spectroscopy as a method for structure elucidation will be introduced. The typical reactions of alcohols, amines, aldehydes, ketones, aromatic compounds and carboxylic acids and their derivatives will be studied. A brief introduction to carbohydrates and proteins will be presented. Prerequisite: A grade of C or better in CHEM 231. (Sp)

# **CHEM 236**

**Organic Chemistry Laboratory I** Emphasis is on the preparation and properties of organic compounds. Laboratory notebook and safety goggles required. Pre- or corequisite: CHEM 231. (F)

# **CHEM 237**

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

1 cr.

**Organic Chemistry Laboratory II** Emphasis is on the preparation and properties of organic compounds. Laboratory notebook and safety goggles required. Prerequisite: CHEM 236. Pre- or corequisite: CHEM 232. (Sp)

# CHEM 246

# Synthetic and Analytical Techniques in Organic Chemistry I

Application of classical and modern synthetic and analytical laboratory techniques to synthetic and mechanistic organic chemistry. Lab notebook and safety goggles required. Pre- or corequisite: CHEM 231. (F)

# CHEM 247 1 cr. Synthetic and Analytical Techniques in Organic Chemistry II

Application of classical and modern synthetic and analytical laboratory techniques to synthetic and mechanistic organic chemistry. Lab notebook and safety goggles required. Prerequisite: CHEM 246. Pre- or corequisite: CHEM 232. (Sp)

# CHEM 251 Analytical Chemistry

Theories and methods of analytical chemistry are discussed. Knowledge of basic algebra is necessary. Topics include statistical data analysis, as well as gravimetric, titrimetric and spectroscopic methods of analysis. Prerequisite: CHEM 122. (F, Sp)

# CHEM 256 Analytical Chemistry Lab

Techniques of quantitative chemical and instrumental analysis with application to real samples are examined. Includes work with titrimetric, spectroscopic and gravimetric methods of analysis. Laboratory manual (special course fee), notebook and safety goggles required. Preor corequisite: CHEM 251. (F, Sp)

# **CHEM 289**

# **Special Topics in Chemistry**

CHEM 295

**Introduction to Undergraduate Research** Students will conduct literature or laboratory work in a specialized area. Maximum of one credit per semester. Safety goggles, scientific calculator and lab notebook required. Prerequisite: consent of instructor. No more than one credit of CHEM 295 can be counted toward a major or minor in Chemistry. (F, Sp)

# **CHEM 311**

1 cr.

2 cr.

2 cr.

1 cr.

0.5-3 cr.

1 cr.

# **Polymer Chemistry**

Introduction to the major polymerization mechanisms with special emphasis on polymerization kinetics, control of macromolecular structure and qualitative structure-property relationships. Prerequisites: CHEM 232 and MATH 167. (F or Sp)

3 cr.

3 cr.

# CHEM 340 3 cr. Physical Chemistry Biological Systems

Thysical Chemistry Biological Systems This course is an introduction to physical chemistry with emphasis on applications to biochemical systems. The areas of thermodynamics, equilibrium, redox properties, kinetics, colligative properties, diffusion, viscosity, sedimentation and spectroscopy are covered and application is made to macromolecules. Scientific calculator required. Prerequisites: CHEM 232, 251; MATH 166. (F)

# CHEM 341 3 cr. Chemical Thermodynamics and Kinetics This course will cover aspects of

thermodynamics, equilibria, chemical kinetics, electrochemistry, kinetic molecular theory of gases, and an introduction to statistical mechanics. Prerequisites: MATH 266, CHEM 122, and PHYS 152 or 162. (F)

# CHEM 342

**Molecular Structure and Spectroscopy** This course will cover aspects of atomic and molecular structure, quantum mechanics, chemical bonding, spectroscopy, and photochemistry. Prerequisites: MATH 266, CHEM 122, and PHYS 152 or 162. (Sp)

# CHEM 355 1 cr.

Separation Science Laboratory Separation techniques applied to the analysis of chemicals and biochemicals. Includes work with gas and liquid chromatography, capillary electrophoresis, protein/peptide/DNA purification, centrifugation, filtration and sample preparation. Emphasis is on the steps involved in developing separation methods, rather than simple replication. Laboratory manual (special course fee), notebook, and safety goggles required. Prerequisites: CHEM 232 and CHEM 237 or 247. (F,Sp)

# CHEM 356 1 cr. Chemistry Instrumentation Lab

This is a writing intensive course. For chemistry majors and other science and pre-professional students who need advanced laboratory experience in chemical instrumentation. Includes work with uvvisible and infrared spectroscopy, nuclear magnetic resonance, mass spectroscopy, gas and liquid chromatography,

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electrochemistry, and computer applications in chemistry. Safety goggles and laboratory notebook are required. Prerequisites: CHEM 251, 256. (F, Sp)

3 cr.

3 cr.

1 cr.

3-6 cr.

3-6 cr.

# CHEM 361 Biochemistry I

The course is an introduction to the structures and functions of the major chemical constituents of living organisms and the common metabolic pathways used to produce energy to meet cellular needs. Prerequisites: BIOL 240, CHEM 237 or 247, and a grade of C or better in CHEM 232. (F)

# CHEM 362 Biochemistry II

The course is a survey of the metabolism of lipids, proteins, nucleotides, nucleic acid synthesis and the regulation of gene expression. Prerequisite: CHEM 361/561. (Sp)

# CHEM 366

**Biochemistry Laboratory** This is a writing intensive course. An introduction to the fundamental techniques used in the study of biochemical systems. Separation and analysis of biological molecules and subcellular fractions. Enzyme kinetics and metabolism. Three hours of laboratory per week. Requires computer data analysis. Laboratory manual (special course fee), safety goggles, and laboratory notebook are required. Prerequisite: CHEM 256 or consent of instructor, and CHEM 361/561. (Sp)

# **CHEM 378**

### 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)

# CHEM 379 Internship

This course is designed to allow students to earn credit for intensive work experiences in the field of chemistry. Each internship will be different, depending upon the student and the internship site chosen. In each case, the internship must include a large component of chemistry which will augment and integrate with that student's professional development. Internship experiences with a low component of chemistry or those of a lower professional level will not be acceptable. Internships might be associated with a variety of businesses or governmental agencies in the areas of research, product development, quality control, production, and regulatory control. Prerequisites: CHEM 232 and 237 or 247 and consent of the department chair and the dean of the College of Arts and Sciences. (upon student request)

# CHEM 389 0.5-3 cr. Special Topics in Chemistry

# CHEM 401 1 cr. Advanced Chemistry Lab I

This is a writing intensive course. This course is for chemistry majors or other students requiring advanced experimentation in integrated laboratory experiments requiring physical measurement, analysis, synthetic methods, spectroscopy, kinetics and computer data analysis. Techniques illustrate principles of physical chemistry and inorganic chemistry synthesis and characterization. Safety goggles and laboratory notebook are required. Prerequisites: CHEM 237 or 247, 256 and 356/556 or consent of instructor. Pre- or corequisite: CHEM 341/541. (F)

# CHEM 402 1 cr. Advanced Chemistry Lab II

This is a writing intensive course. This course is for chemistry majors or other students requiring advanced experimentation in integrated laboratory experiments requiring physical measurement, analysis, synthetic methods, spectroscopy, kinetics and computer data analysis. Techniques primarily illustrate principles of physical chemistry. Safety goggles and laboratory notebook are required. Prerequisites: CHEM 401/601 or consent of instructor. Pre- or corequisite: CHEM 342/542. (Sp)

# CHEM 411 Polymer Science

Investigation of the properties of macromolecules with special emphasis on elasticity, viscosity, the semi-crystalline and glassy states, mechanical and thermodynamic properties, methods of characterization and the use of mathematical models to predict behavior. Prerequisite: CHEM 341/541 or consent of instructor. (Sp, alternate years)

# CHEM 416 Polymer Laboratory

This course is designed to familiarize the student with standard laboratory procedures for the synthesis of the major types of polymers, the measurement of molecular weight for high polymers and the experimental methods unique to the characterization and physical property determination for macromolecules. Prerequisite: CHEM 311/511 or CHEM 411/611 or consent of instructor. (Sp, alternate years)

# **CHEM 422**

# **Advanced Inorganic Chemistry I**

This is a writing intensive course. The course is an introduction to the modern theories of inorganic chemistry with emphasis on atomic structure, bond theories, chemical forces, acid-base chemistry, chemistry in aqueous and nonaqueous systems, and theory and structure of coordination complexes. Prerequisite: CHEM 342/542 or consent of instructor. (F)

3 cr.

3 cr.

3 cr.

1 cr.

### CHEM 432 Advanced Organic Chemistry

Course content will include kinetics and mechanisms of organic reactions. Structure and reactivity will be discussed in terms of molecular orbital theory. Strategy in designing multistep organic syntheses will be presented. Prerequisite: CHEM 232. (Sp)

# CHEM 461 Pharmacology

The principles governing the distribution, elimination and mechanisms of action of drugs will be introduced. Selected pharmacologic classes will be presented in detail. Prerequisite: BIOL 150, CHEM 232. (Sp)

# **CHEM 480**

# Chemistry Communications and Research

This is a writing intensive course. The course is primarily intended for chemistry majors in their senior year. Students are required to research a specialized area of interest in any area of chemistry and then report their results in a departmental seminar. Students may elect to do either library or laboratory research. Prerequisites: senior standing, completion of at least 20 cr. of chemistry or consent of instructor.(F, Sp)

# CHEM 489 Special Topics in Chemistry

0.5-3 cr.

An in-depth investigation of an aspect of chemistry not covered in detail in other courses. The course content will vary depending on student interest. Prerequisite: consent of instructor. (F, Sp)

# **CHEM 495**

1 cr.

# **Undergraduate Research** Students will conduct literature or

laboratory work in a special area. Maximum of one credit per semester; two credits total. Safety goggles and laboratory notebook are required. Prerequisite: consent of instructor. (F, Sp)

3 cr.

# **CHINESE**

CHIN 101	<b>4 cr.</b> W	
Beginning Chinese I	<b>4 CI.</b> 10	
An introduction to the study of refo		
Mandarin Chinese. Basic vocabular		
calligraphy, conversation and cultur		
material. CHIN 101 presumes no previous		
study of the language. (F)		
	0	
CHIN 102	4 cr. J	
Beginning Chinese II	Т	
Continuation of the study of reform	ied d	
Mandarin Chinese. Basic vocabular		
calligraphy, conversation and cultur		
material. Prerequisite: CHIN 101 or	r p	
equivalent. (Sp)	a	
	A	
	<b>0.5-3 cr.</b> is	
Special Topics in Chinese	S	
CHIIN 200	с: о <b>г</b> о	
	<b>0.5-3 cr.</b> յս Տ	
Special Topics in Chinese	C	
CHIN 489	0.5-3 cr. C	
Special Topics in Chinese	(	
Special Topics in Chinese	A	
CHIN 490	<b>1-3 cr.</b> U	
Readings in Chinese	0	
Intermediate or advanced study in reformed		
Mandarin Chinese. Prerequisite: CHIN 102		
or equivalent. (F, SP)	0	
	d	
	<b>0.5-3 cr.</b> a	
<b>Special Topics in Chinese</b>	0	
	05-3 cr 0	
CHIN 689 Special Topics in Chinese	0.5-3 cr. C L	
special topics in Chinese	T	
CHIN 789	<b>0.5-3 cr.</b> th	
Special Topics in Chinese	E	
Special Topics in Chinese	L.	

# **CRIMINAL JUSTICE**

CJ 202 3 cr. **Introduction to Criminal Justice** The course is designed to introduce students to the processes, procedures, practices and interrelationships of those agencies involved in the American criminal justice system. The role of law enforcement, the court systems, and the processes of corrections will be examined with an emphasis upon examining each component and their relative strengths and weaknesses in the crime control process. Contemporary issues and problems encountered by the criminal justice system will also be addressed. Prerequisite: One of the following: SOCI 100, ANTH 100, PSYC 101, POLS 114

# CJ 310

# Gangs in the United States

Examination of the criminal phenomenon of gangs and their development in the

3 cr.

United States. The course covers the historical aspects of gangs, the conditions which encourage them to form, the organization and activities of modern gangs, and efforts at prevention and control. Prerequisites: CJ202 and one of the following: SOCI 100, ANTH 100, PSYC 101, POLS 114, SOWK 150.

# CJ 320 Iuvenile Delinquency

The course examines the history and development of juvenile justice in America, including the changing philosophical basis of the system; the role and function of the police, juvenile courts, and institutional and community correctional programs. A variety of important topics and current issues are examined throughout the course, such as the nature and extent of juvenile crime, gang-related delinquency, and juvenile rights. Prerequisite: CJ 202 or SOWK 215. (Yearly)

CJ 322 Criminology

A study of crime and criminals in the United States with a focus on the varieties of criminal behavior and the nature and extent of crime in our society. A core component of this course is an examination of the theoretical interpretations and developments in the explanation of crime and criminal behavior. Prerequisite: CJ 202 or SOWK 215. (Yearly)

# CJ 376

Law Enforcement Cert Internship This internship involves completion of the 400 hour Certification Academy in Eau Claire, Wisconsin, allowing students to obtain the State of Wisconsin Basic Recruit Training Certificate for police officers. Costs of the training must be paid by the student. Prerequisites: Junior status, criminal justice minor, minimum GPA of 2.5 both overall and in minor, completion of candidate package and acceptance into the Certification Academy. Graded Pass/ Fail. (F, Sp, SS)

# CJ 379 6-12 cr. Internship in Criminal Justice

The course is designed for criminal justice minors desiring actual work experience in a supervised setting such as law enforcement, corrections, probation/parole, etc. Prerequisites: criminal justice minor, 2 sociology/ criminal justice, 2.25 overall GPA, 2.5 sociology/criminal justice GPA, admission to the Sociology/Criminal Justice Internship Program. (F, Sp, SS)

CJ 389 0.5-3 cr. Special Topics in Criminal Justice This course provides an opportunity to study a selected topic in Criminology and/ or Criminal Justice. Sample topics include white collar crime, capital punishment, racial and gender issues in crime and justice, etc; Prerequisite: CJ 202 or consent of instuctor.

3 cr.

# CJ 430

3 cr.

3 cr.

6 cr.

# Trends and Issues in Incarceration

This writing intensive course addresses the history, developments, structure, and present status of correctional institutions and the people assigned to reside within them.. The philosophical basis of punishment and corrections in our society will be discussed, and students will examine issues and trends related to the use and design of policies, programs, and the institutions themselves. Prerequisite: CJ 320 or CJ 322. (Odd years, Sp)

# CJ 435 3 cr. Alternatives to Incarceration

An examination of the development and implementation of correctional programs designed to allow offenders to remain in the community while completing their sentence. The role of offenders, supervisory agencies, and society will be explored. The focus will be on the traditional programs of probation and parole and on newer alternative sanctions like house arrest, boot camps, and intensive supervision. This course is writing intensive. Prerequisites: CJ 320 or CJ 322 (Even years, Sp)

# COMMUNICATIVE DISORDERS

# COMD 160 Introduction to Communicative Disorders

This course is designed as an introductory survey of speech, language and hearing disorders. Specific topics considered include disorders of articulation, stuttering, voice, language and hearing. Students completing 160 should not take 163. (F, Sp)

# COMD 162 3 cr. Introduction to American Sign Language This is an introductory-level class enabling

This is an introductory-level class enabling students to gain a basic understanding and use of the language and culture of the deaf in America. (F, Sp, SS)

# 4 cr.

4 cr.

3 cr.

# COMD 261 Language Development

Normal language development from birth through adolescence will be studied. (F)

# COMD 262 Speech Systems

This course covers the anatomy and physiology of the speech production mechanism, with special emphasis on the role of the respiratory, laryngeal and oral

148

articulatory systems. The neuroanatomy for speech system functioning is integrated into the discussion of speech production. Prerequisite: 160. (F)

# COMD 263 Phonetics

Students will study the production and classification of the sounds of American English, with emphasis upon transcription using the International Phonetic Alphabet. This course of study aids the student in understanding the sound structure of American English. Those interested in a career in communicative disorders must be aware of the sound variation within the language and demonstrate skill in the use of the International Phonetic Alphabet. Prerequisites: 160 and 262. (Sp, alternate years)

# COMD 264 Speech Science

Students will study the acoustics of speech. They will learn the acoustic theory of speech and how to utilize the oscilloscope, spectrograph and computer in analysis of sound. The class will focus on acoustic assessment techniques as related to different speech pathologies. (Sp)

# **COMD 275**

Practicum: Observation and Discussion

This course primarily involves directed observation of therapeutic and diagnostic sessions. A total of 25 hours of observation is required. Prerequisite: 160. (F, Sp)

# COMD 289 0.5-3 cr. Special Topics in Communicative Disorders

# **COMD 350**

Articulatory and Phonological Disorders This course will introduce students to normal phonological development and phonological disorders. Emphasis will be placed on informal and formal assessment strategies, program planning, and intervention strategies. Prerequisites: 262 and 263. (Sp)

# COMD 360

Audiology

This course provides information pertaining to the anatomy and physiology of the auditory system, audiological diagnostic test procedures auditory disorders, and basic acoustics. Prerequisite: 160. (Fa)

# **COMD 362**

Language Appraisal and Intervention The course entails a study of formal and informal measures of language usage and knowledge and includes an in-depth description of the diagnostic strategies for the evaluation of language and subsequent intervention techniques. It requires observation of, and participation in, the diagnosis and treatment of language disorders. Prerequisites: 160; and 261 or 461. (Sp)

# COMD 375 Clinical Procedures

3 cr.

3 cr.

1 cr.

3 cr.

3 cr.

3 cr.

Sp)

This is a writing intensive course. This course provides training which focuses on the therapeutic approaches in communicative disorders. Students will learn from case discussions involving patients with: voice disorders, stuttering, oral/facial anomalies, articulation disorders, laryngectomies, aphasia, apraxias, dysarthrias and language disorders. The diagnostic outcomes which lead to remediation programs will be addressed.

# COMD 378 3-6 cr. Semester Abroad

Prerequisites: 160, 262, 263 and 275. (F,

The research component of the Semester Abroad program. A semester of directed research in a European country. Taken in conjunction with INTS 377/577. Prerequisites: participation in the Spring Semester Abroad orientation seminar; 2.25 GPA; junior or senior standing. (F)

# COMD 379 1-3 cr. Clinical Experience Internship

Students will be placed in clinical settings which allow them to actually conduct speech and language therapy under the direct supervision of ASHA certified speech pathologists. The clock hours accumulated and the nature of the clinical placement will depend on the students academic standing and prior clinical experience. Prerequisites: 160, 262, 263, 275, 375 and the consent of instructor or departmental chair; and a minimum GPA of 2.75 in the major, minor and professional education coursework. (F, Sp, SS)

# COMD 389 0.5-3 cr. Special Topics in Communicative Disorders

Increasing numbers of children with autism spectrum disorders are found in today,s classrooms. As a result, there is an urgent need for school professionals to better understand autism and its implications in schools and society as a whole. Participants in this class will gain the knowledge needed to become active and informed team members and advocates for students with autism spectrum disorders and will learn effective strategies to enhance communication, socialization, and learning when teaching these children. This is a valuable opportunity for teachers, special ed. majors. (Upon student request)

# COMD 460 Voice Disorders

2 cr.

This course is a comprehensive study of phonatory disorders involving defective vocal behavior and laryngeal disabilities involving anatomic defects and physiologic dysfunction of the vocal mechanism. Prerequisites: 262 and 263. (F)

# COMD 463

# **Behavior Modification/Stuttering**

Behavioral principles and procedures for modifying communicative disorders will be examined along with methods of measuring and verifying behavior change resulting from application of treatment procedures. Training in development of modification programs for the communicatively impaired and the study of the nature of stuttering and the therapeutic procedures used in the prevention and treatment of stuttering are covered. Prerequisite: 160. (F)

# COMD 465 2 cr. Current Issues/Research

# COMD 466 Aural Rehabilitation

To provide information related to basic principles, evaluations and therapy procedures for improving receptive communication for persons with hearing and auditory deficits. Prerequisite: 360. (Sp)

# COMD 469 American Sign Language

3 cr.

3 cr.

3 cr.

3 cr.

This course implements a discussion of the philosophy and practical application of American Sign Language. Emphasis will also be on origins to present day use of ASL, deaf culture, types of hearing loss, speech reading, interpreting, and technology available for the deaf. (upon student request)

# COMD 489 0.5-3 cr.

Special Topics in Communicative Disorders

COMD 499 1-3 cr. Independent Study

# COUNSELING

COUN 289	0.5-3 cr.
Special Topics in Counseling	

### COUN 310 2 cr. Counseling Skills for Teachers

This course gives the prospective teacher/ educator the necessary background and skills in counseling practices designed for classrooms and educational settings. The focus of the course will be to present a model of educational counseling based on the principles of preventive programming, educational interventions and developmental understanding of student concerns. In addition, there will be an emphasis on specific interventions, skills and counseling strategies that have been determined to be effective for educational settings. The course will be primarily concerned with the emotional development of children and adolescents. Prerequisite: TED 211 or 212. (F, Sp, SS)

COUN 389 Special Topics in Counseling	0.5-3 cr.
COUN 407	2 cr.

Perspectives on Aging

# **COUN 410**

Introduction to Counseling

This course is designed to familiarize students with an overview of the field of counseling and with the basic concepts and skills associated with school and community settings. There will be a shared emphasis on experiential activities, theories and research in counseling. Prerequisite: junior, senior or graduate standing. Colisted as COUN 410/610.(F,Sp)

COUN 411 Introduction to Elementary Cou	3 cr. nseling
COUN 412 Developmental Counseling	3 cr.
COUN 420 Career Counseling	3 cr.
COUN 422 Emotional and Behavioral Probl	3 cr. ems
COUN 481 Special Topics in Counseling	1-3 cr.
COUN 489 Special Topics in Counseling	0.5-3 cr.

# **CROP SCIENCE**

# CROP 120 Plants and Society

This course will investigate how plants have been manipulated to promote the development of modern societies. Specifically, the course will focus on how global crop production interconnects societies, provides food, fiber, medicine and aesthetics. It will emphasize the contemporary issues of agriculture. Ethical citizenship will be emphasized in regards to land stewardship and social responsibilities.

# CROP 161 Introduction to Plant Science

Students will study the morphology, growth and economic utilization of plants. The effects of environmental factors such as light, temperature and moisture on growth and yield are examined. The laboratory provides an opportunity to closely examine and carry out experiments on plant material. Lab fee required. Co-listed as HORT 161. (F, Sp)

# CROP 257 Genetics

3 cr.

3 cr.

Students will study important concepts of plant genetics including linkage, extra chromosomal inheritance, quantitative inheritance, and environmental effects on phenotype, ploidy and mutations as related to agronomic and horticultural crops. Prerequisites: CROP or HORT 161, BIOL 100. (F)

# CROP 260 Plant and Seed Identification

The course is designed to provide students with the skills necessary to characterize and identify plants and seeds of agronomic crops and weed species. Prerequisite: CROP or HORT 161. (F, Sp)

# CROP 263 Forage Crop Production

This course covers the theory and cultural practices of forage crop production. Major emphasis is given to forage production in the midwest and Wisconsin specifically, but students also are introduced to species and practices utilized in other soil and climatic environments. Species characteristics, adaptations, growth and management requirements of the major forage legumes and grasses are discussed. Prerequisite: CROP or HORT 161. (F, Sp)

CROP 2663 cr.Corn and Soybean ProductionThis is a writing intensive course. Thecourse provides an in-depth investigation ofthe agronomic requirements and practicesof corn and soybean production. Graingrading and determination of market gradesof corn and soybeans is covered. Field tripand a crop judging exercise is required.Prerequisite: CROP or HORT 161. (F, Sp)

# CROP 267 3 cr. Small Grain and Miscellaneous Crop Production

This course is an in-depth investigation of the requirements and practices of wheat, oats, barley, rye, triticale, sorghum, rice and other miscellaneous protein and oil seed crops. Grain grading and determination of grades of these crop species are also covered. Two field trips and a crop judging exercise are required. Prerequisite: CROP or HORT 161. (Sp)

2 cr.

4 cr.

3 cr.

2 cr.

# CROP 268 Grain Quality

3 cr.

3 cr.

2 cr.

3 cr.

A brief description of the history of grain grading and seed analysis, including the reasons for grain grading, followed by a discussion of how grain is priced when delivered to an elevator, grain blending, causes for grade and price reduction, factors responsible for grain quality loss, and measures for preventing grain quality loss. Lab sessions include descriptions and use of grain grading equipment, grain grading problems, trips to a terminal elevator and local grain bins, a look at damages that affect market quality, and some practical experience in seed analysis and assignment of grade to grain samples. (F)

# CROP 270 2-4 cr. Internship I

An additional off-campus occupational work experience for the student. Involves full-time employment with a cooperating agency or firm. Prerequisites: 30 cr. and consent of director and faculty coordinator. (F, Sp,SS)

# CROP 271 International Internship

An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Special course fees required. Prerequisites: 30 semester credits. (F, Sp, SS)

# CROP 289 0.5-3 cr. Special Topics in Agronomy

### CROP 345 Weed Control

Principles and methods involved in the control of weeds in field crops, lawns and horticultural crops will be examined. Prerequisite: CROP 161. (Sp)

# CROP 363 Pasture Production

The course will define and describe the various pasture and grazing system alternatives. Pasture production and management principles will focus on species and variety selection; establishment methods; maintaining productive, high quality stands; managing the grazing process; and evaluating pasture productivity. Students will learn to design intensive rotational grazing systems, minimize pasture hazards, and design pastures to meet the needs of various classes of livestock such as dairy cows, beef cows and calves, sheep, and horses. Prerequisites: CROP 263 or consent of the instructor, and junior or senior standing. (F)

# **CROP 368**

Sustainable Agriculture

An interdisciplinary critical analysis of production agriculture as a sustainable industry. Students will engage in an interactive dialogue about technical, social and economic concepts related to sustainability in production agriculture systems. Concepts include, but are not necessarily limited to: sustaining soil, water and air resources; sustaining the biodiversity, environmental health, energy efficiency and economic viability of agricultural systems; sustaining rural communities; and organic farming. Students will also learn about government programs and regulations related to sustainability and will become acquainted with several organizations that promote agricultural sustainability. Prerequisites: junior or senior Standing, or consent of instructor (F, Sp)

# **CROP 370** Internship II

2-4 cr.

3-6 cr.

0.5-3 cr.

3 cr.

4 cr.

An additional off-campus occupational work experience for the student. Involves full-time employment with a cooperating agency or firm. Prerequisites: Ag. 270 and consent of director and faculty coordinator. (F,Sp, SS)

# **CROP 378** Semester Abroad

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; and junior or senior standing. (F)

# **CROP 389** Special Topics in Agronomy

# **CROP 410**

**Plant Breeding and Crop Improvement** This is a writing intensive course. Genetics systems and quantitative inheritance in relation to improvement of plant populations will be examined. Methods of hybridization, selection, testing, distribution and seed certification of grain, forage, vegetable and fruit crops are covered. Field trip is required. Prerequisites: CROP or HORT 161, CROP 257 or ANSC 257. (SP)

# **CROP 435 Crop Physiology**

Students will study the physiology and nutrition of economic crop plants, particularly as influenced and modified by cropping techniques and environmental factors. Prerequisites: CROP or HORT 161, BIOL 100, AGBI 250. (Sp)

# **CROP 451**

3 cr.

**Integrated Pest Management** This is a writing intensive course. The course is designed to examine the theory, concepts and technology involved in integrated pest management. The course will include pesticide characteristics, usage and safety; economic considerations; human and environmental concerns; and descriptions of pest management systems being used in various crops. Prerequisites: CROP or HORT 161 and junior or senior standing.

# **CROP 462** Agricultural Ecology

# **CROP 485**

Seminar: Agronomy

This is a writing intensive course. The course includes a review of new developments in agronomy and presentation of seminars covering one or more of these developments. Prerequisite: senior standing. (F)

### **CROP 489** 0.5-3 cr. Special Topics in Agronomy

# **CROP 490**

**Independent Study** Students will perform independent study and/or research projects under the supervision of a faculty member. Prerequisites: junior or senior standing and consent of instructors.(F, Sp)

# **COMPUTER SCIENCE AND INFORMATION SYSTEMS**

# **CSIS 105**

**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. (F,Sp)

# **CSIS 151**

# **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 Programming I**

An introduction to fundamental computer concepts and Object Oriented Programming.A Java will be used to teach the basic concepts of program analysis, design and implementation.A Topics include: Object Oriented Programming, Applets, Applications, Classes, Objects, Methods, Data Types, Conditional Execution and Loops. Prerequisite: Math 146 (F, Sp)

# **CSIS 162 Programming II**

3 cr.

3 cr.

3 cr.

3 cr.

A continuation of fundamental computer concepts and Object Oriented Programming.A Java will be used to teach the basic concepts of program analysis, design and implementation.A Topics include: Arrays, Search, Sort, File IO, Exceptions, Packages, Event Driven Programming, GUI Objects, Inheritance, Polymorphism and Recursion. Prerequisite: CS161 (F, Sp)

# **CSIS 215**

# **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: CBE 100 or Consent of CSIS Chair (F, Sp, SS)

# **CSIS 225** 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. (F or Sp)

# **CSIS 237**

# **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.A 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

1-3 cr.

2 cr.

3 cr.

3 cr.

1 cr.

2 cr.

computer networks and network security.A The course also includes a lab component on installation, setup and administration of network operating systems. Prerequisite: CSIS 162 (F, Sp)

# **CSIS 279**

# **Cooperative Education and 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 onsite 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**

# **Current Topics in Computer Systems** and Information Systems

For students who wish to work on a topic in a computer science related area. Prerequisite: Sophomore Standing. Offerd (F, Sp, SS)

# **CSIS 311 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 CSIS 311. Prerequisites: CSIS 236 (may be taken concurrently) or MATH 166. Familiarity with at least one programming language. (Sp, odd years)

# **CSIS 317** 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 Structured Cobol**

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, even years)

# **CSIS 325** Web Development II

1 cr.

1-3 cr.

3 cr.

3 cr.

3 cr.

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 clientside scripts. ASP (Active Server Pages) will also be covered. Prerequisite : CSIS 225 (SS)

# **CSIS 328 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. Prerequiste : CSIS 162 (SP, SS)

# **CSIS 333 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 162. (F)

# **CSIS 337 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 237. (F, odd years)

# **CSIS 343 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.A Prerequisites: CS 237;(F)

# CSIS 346 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

CSIS 346. Prerequisites: MATH 167 and capability in at least one programming language. (F)

# **CSIS 347**

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

# **Numerical Methods 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 finitedifference methods. Co-listed as CSIS 347. Prerequisite: MATH 266 and capability in at least one programming language. (Sp, odd years)

3 cr.

### **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. CSIS 237 (F, Sp)

### **CSIS 378** 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 in Computer Science**

A temporary paid job (usually lasting for one semester or summer) providing pre-professional experience in an offcampus 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 389	0.5-3 cr.
<b>Special Topics in Computer</b>	Science

CSIS 402	3 cr.
Algorithms	

# **CSIS 416**

# Structure of Programming Language

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.(F)

# **CSIS 423**

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

**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 (Sp)

# **CSIS 433**

# **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

# Advanced Computer Networks

This is an advanced course on computer networks. A Students will learn the theoretical and technical aspects of computer networks. A Topics include: Signals, Encoding and Decoding, Transmission of Digital Data, Transmission Media, Multiplexing, Error Detection and Correction, Data Link Control, Data Link Protocols, Switching, Pointto-Point Protocols, A Networking and Internetworking Devices, Transport Layer and TCP/IP Protocol Suite. Prerequisite: CSIS 247 (Sp)

# CSIS 451

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

# **Artificial Intelligence**

This is an introductory course in the field of Artificial Intelligence. A Topics include: Rule-based Expert Systems, Uncertainty Management, Fuzzy Logic, Fuzzy Inference Systems, Artificial Neural Networks and Evolutionary Programming. Prerequisite: CSIS 237 (F)

# CSIS 484

# 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 0.5-3 cr. Special Topics in 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 490 1-3 cr. Readings in Computer Science

# CSIS 499 Independent Study

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)

# DANCE

# DANC 100 Dance Appreciation

An introductory course which offers cross cultural comparisons of indigenous, traditional and classical dance forms from six continents. This course is designed to increase one's understanding and appreciation of dance as a fine art form and an integral part of cultural mores, a medium of cultural fusion, and a creation of individual artists. The course will emphasize the development of cultural forces which fuse African and Western dance traditions which have resulted in many of the American social dance forms of today. (F, Sp)

# 3 cr. DANC 107 Social Dance

An introductory social dance course to include waltz, foxtrot, swing, polka, rumba, salsa and cha cha-cha . Emphasis will be placed on rhythm, style and skill development. May be repeated for a total of two credits. (F, Sp)

### DANC 110 Basic Jazz

1 cr.

0.5-0.5 cr.

0.5-0.5 cr.

An introductory jazz dance course with emphasis on technique and style. May be repeated for a total of three credits. (F, Sp)

### DANC 120 Fundamentals of Ma

1 cr.

1 cr.

1 cr.

# Fundamentals of Movement through Dance

An introductory course in movement fundamentals with emphasis on body awareness, rhythmic competency, coordination and alignment through basic dance skills in the technique of modern dance. May be repeated for a total of three credits. (F, Sp)

# DANC 150 Dance Improvisation

The use of movement improvisation as an introduction to structured form through group and individual problem solving. May be repeated for a total of three credits. (F)

# DANC 221

# Modern Dance Technique

Intermediate level practice of modern dance techniques with emphasis on technical skill development. Prerequisite: DANC 120 or consent of instructor. May be repeated for a total of three credits. (not offered on a yearly basis)(Sp)

# DANC 224 Ballet I

1-3 cr.

3 cr.

# 1 cr.

An introductory course in the theory and practice of classical ballet with emphasis on alignment, strength, coordination and flexibility. The class will introduce the students to elementary exercises designed to master the basic stance of the body, positions of the legs, feet, arms and head. May be repeated for a total of three credits. (F)

# DANC 226 Ballet II

1 cr.

An elementary-level course in the theory and practice of classical ballet, with emphasis on alignment, strength, coordination and flexibility. Ballet II will include a greater quantity of those exercises already learned in Ballet I and will gradually introduce them with faster tempi and in elementary combinations. Prerequisite: DANC 224 or consent of instructor. May be repeated for a total of three credits. (Sp)

# DANC 250 Dance Composition

An introductory dance composition class designed to develop ones ability to choreograph in the modern idiom. Emphasis will be on identifying and expanding the individual's movement vocabulary and knowledge of compositional elements. May be repeated for a total of four credits. Prerequisites: DANC 120 and 150 or consent of instructor. (F)

# DANC 257 Rhythms

Trends, methods and materials for the teaching of rhythmic activities including basic social dance forms and American square dancing with an emphasis on ethnic dances of various cultures. Prerequisite: DANC 120. (F)

# DANC 260

Dance Production/Repertory

Directed rehearsal/production experiences in dance. Class work is to include rehearsals, performances, pre-concert preparation and basic preparation for dance production, a required skill for student performers, and dance minors. Prerequisite: DANC 120 or consent of instructor. May be repeated for a total of six credits. (Sp)

# DANC 307 Social Dance II

An intermediate level study of the theory and practice of social dance with emphasis on Swing and Latin forms. May be repeated for a total of two credits. Prerequisite: DANC 107 or consent of instructor. (Sp, SS: not on a yearly basis)

# DANC 310

Jazz Dance II

An intermediate level study of the theory and practice of jazz dance with an emphasis on increased strength, coordination and flexibility. Body isolation, center work and across the floor work will be an integral part of each class. May be repeated for a total of two credits. Prerequisite: DANC 110 or consent of instructor. (Sp, SS: not on a yearly basis)

# **DANC 362**

Dance for Elementary School

A study of teaching methods for dance in elementary curricula with emphasize on creative problem solving techniques. Prerequisites: DANC 120 and DANC 257 or consent of instructor. (Sp)

# DANC 378 Semester Abroad

# DANC 389 Special Topics in Dance

2 cr.

2 cr.

1-3 cr.

1 cr.

1 cr.

2 cr.

This course provides an opportunity for in-depth study of contemporary issues, programs or practices in dance and dance education. Depending upon the specific topics of study, the content of the course may focus on research findings, theoretical advances, practical applications, and theory as they affect dance as an art form or dance education within the schools. Because of its focus on contemporary issues the course may be appropriate for arts/dance educatuion students in training and experienced teacheres who desire in-depth training in a specific area. (F, Sp)

# DANC 465 World Dance: Expl Cult

1-3 cr.

3 cr.

1 cr.

1 cr.

**Readings in Dance** This course is designed as a supplement to students' required work and allows the student opportunity for an in depth study of issues and/or problems in dance. The students will work individually with a faculty member to plan, conduct, assess, and present research. Prerequisite: Consent of instructor. (F, Sp, SS)

# **DAIRY SCIENCE**

# DASC 120

**DANC 490** 

**Orientation to Dairy Science** This course is designed to help students in the Dairy Science major identify career and educational objectives and develop a comprehensive strategic plan for meeting those objectives during their college careers. Elements of this plan include supporting course work, internships, career

services, and extracurricular activities. The process of strategic planning is facilitated by classes, workshops, and beginning the development of a professional student portfolio. Major points of emphasis are business management, time management, and student contact with dairy industry professional(s). (F)

# DASC 210 Dairy Cattle Evaluation

Type characteristics of dairy breeds, comparative judging, linear classification techniques. (Sp)

# DASC 270 2-4 cr. Internship I

An additional off-campus occupational work experience for the student which involves full-time employment with a cooperating agency or firm. Prerequisites:

**6 cr.** 30 cr. and consent of the faculty coordinator. (F, Sp, SS)

**DASC 306** 

1-3 cr.

3 cr.

**Dairy Production** Students will learn the principles of general production and management of the modern dairy enterprise. Topics include: industry trends, milk marketing, applied genetics and breeding programs, reproduction, dry cow management and nutrition, replacements, herd health, facilities, personnel issues, waste management, lactation, milking systems, and records systems. Prerequisites: ANSC 232,257. (F, Sp)

# DASC 310 1 cr. Advanced Dairy Cattle Evaluation Advanced training in dairy cattle judging techniques. Preparation for national judging

techniques. Preparation for national judging competition. Weekend class attendance required. (F during first half of semester)

# DASC 370 Internship II

An additional off-campus occupational work experience for the student which involves full-time employment with a cooperating agency or firm. Prerequisites: ANSC 270 and consent of the faculty coordinator. (F, Sp, SS)

# DASC 401 Dairy Nutrition Workshop

2 cr.

2-4 cr.

**Darry Nutrition workshop** Survey of recent advancements in dairy cattle feeding, including a review of ruminant digestive tract as related to new concepts in dietary energy, protein, minerals, vitamins and feed additives. (SS)

# DASC 404

Lactation and Milk Quality Anatomy, physiology and endocrinology of the mammary gland emphasizing factors affecting milk yield and composition. The preservation of milk quality through sanitation and control of mastitis. Prerequisites: ANSC 306. (F)

# DASC 406

3 cr.

3 cr.

Advanced Dairy Management An advanced study of dairy herd management systems including milking and feeding arrangements, herd health, herd replacements, use of computer systems, personnel issues, and financial impact of management decisions. On-farm trouble shooting will be emphasized. Prerequisite: ANSC 306 (Sp)

# DASC 436 3 cr. Dairy Cattle Nutrition

The course covers an in-depth examination of current nutritional concepts pertaining to dairy cattle. Scientific rationale for nutrient requirements, feedstuff evaluation and recommended feeding practices will be discussed along with integration of biological models with economic principles and practical applications. Students will gain extensive practice in sound ration formulation procedures, both manually and by computer. Prerequisites: AGBI 251, ANSC 306. (Sp)

# **DASC 485**

# Seminar: Dairy Science

This is a writing intensive course. A comprehensive review and discussion of recent literature in the field of Dairy Science. Prerequisite: senior standing. Recommended that student has completed (or be currently enrolled) in a minimum of two of the following: ANSC 346,433, or 448. (F, Sp)

DASC 490	1-3 cr.
Independent Study	

# **ECONOMICS**

### ECON 100 Modern Economics

This course provides students with an understanding of how to use basic economics concepts to analyze current social issues. Possible issues include poverty, unemployment, agriculture, discrimination, crime, pollution, education, health care, and third world development. The focus is on issues rather than theory. May not be taken after receiving a C or better in Econ 201 or 202. Students who have received an A or B in a high school economics course that is approved by the UW-RF Economics Department can receive test-out credit for ECON 100 by earning a B or better in ECON 201 or 202. Contact the Economics Department Chair for a list of approved high school courses.

# ECON 150

# International Economic Issues

This course examines the important international economics topics facing our world today. These include international trade, finance, production and development. It is taught with a low level of technicality and with a focus on issues and policies.

# ECON 201

# Principles of Microeconomics

Students will study the economic behavior of individual households and firms. Product markets, resource markets, market structures, and income distribution are examined. Prerequisite: Second semester freshman standing. (F, Sp)

# **ECON 202**

# Principles of Macroeconomics

Students will study the operation of the

economy as a whole and key indicators such as inflation, unemployment, national income accounting, money and banking, fiscal and monetary policies, and international economics are examined. Prerequisite: Second semester freshman standing.(F, Sp)

# ECON 205

1 cr.

3 cr.

3 cr.

3 cr.

3 cr.

# Quantitative Analysis

The course examines application of certain quantitative techniques in economics and business. Selected topics are functions, graphs, systems of equations, matrix algebra, derivatives, optimization procedures and integration. Prerequisites: MATH 146 and ECON 201. (F, Sp)

# ECON 226 Introduction to Statistics

Basic statistical concepts and methods as applied to business and economics are developed. Topics include: measures of location and variation, probability, probability distributions, sampling distributions, estimation and hypothesis testing. May not be taken for credit if MATH 226 has been taken. Prerequisite: MATH 146 or consent of instructor.(F, Sp)

# ECON 279 1 cr. Cooperative Education and Internship

This course is designed to allow the economics major to earn credit from practical work experience. The experience must be at a professional level and involve the application of economic concepts or techniques to a real world environment. This course can only be taken on a pass/fail basis. A maximum of 1 credit will count toward the Economics major. Prerequisites: consent of department chair and department internship director. Completion of 201, 202, 205, 301, 302, and 326. (upon student request)

# ECON 301 Intermediate Micro

This course is a study of price theory in a market economy. It provides in-depth study of the behavior of individual consumers, business firms, and resource owners in a free-enterprise economy. Prerequisites: Grade of C or better, in ECON 201, 202, and 205. (F)

# ECON 302 Intermediate Macro

The course is a study of economic theory underlying the determination of national income, inflation, unemployment, and economic growth. Other topics include fiscal and monetary policy, theories of consumption and investment, and international trade and finance. Prerequisites: Grade of C or better in ECON 201, 202, and 205.(Sp)

# ECON 305

# Money and Banking

Banking and other financial institutions, financial markets, monetary policy, and monetary theory will be examined. Prerequisites: ECON 201 and 202. (F)

# ECON 308 Pacific Rim Studies

2 cr.

3 cr.

# ECON 312

3 cr.

3 cr.

3 cr.

Political Economy of Discrimination(d) The course examines the role discrimination plays in creating economic barriers in the U.S. economy for the racially defined minorities, and women. The negative impact of discrimination towards these groups is first examined in historical context. Following that, Neoclassical, Institutionalist, and Marxian models of labor market discrimination are critically examined. In light of the historical and theoretical discussion we examine the policies proposed to eliminate discrimination. Prerequisite ECON 201 and SOCI 100. Co-listed as POLS 312. (F or Sp most years))

# ECON 316

# Managerial Economics

An examination of the decision-making techniques available to modern business managers, such as constrained optimization theory, regression analysis, and linear programming. Major topics include demand analysis, cost and production theory, market structure, pricing strategies, and capital budgeting. Prerequisites: ECON 201, 202, and grade of C or better in ECON 205. (Sp)

# ECON 324

### 3 cr.

3 cr.

# Labor Economics

This course examines the unique features of labor markets, wage and employment determination, labor market problems and issues, the macroeconomic implications of labor markets, the labor movement, unionization, the bargaining process, and the effects of the union movement. Prerequisites: ECON 201 and 202. (F)

# **ECON 326**

3 cr.

3 cr.

# 3 cr.

**Statistics for Economics and Business** This is a concentrated study of advanced statistical techniques with an emphasis on their applications to business and economic problems. Topics of interest include: hypothesis testing, analysis of variance, regression and correlation, time series analysis, nonparametric statistics and quality control. Prerequisites: Admission to College of Business and Economics. This includes students admitted to the University Fall 2003. Application for admission is done throught the Dean's Office, CBE.(F, SP)

# ECON 328

# Third World Development: Domestic

This course provides an overview of the economic conditions in less developed countries today. Emphasis is on the domestic economic issues of poverty, income distribution, population, unemployment, agricultural and industrial development, women in development, and others. The course incorporates theory and policy. Prerequisites: ECON 201. (F or SP)

# ECON 329 Third World Development: International

This course provides an overview of the effect of international economic conditions on less developed countries today. Emphasis is on the international issues of trade strategy, foreign investment, foreign aid, technology transfer, debt crisis, structural IMF reforms and others. The course incorporates theory and policy. Prerequisites: ECON 201. (not offered on a yearly basis.)

# ECON 332 Public Finance

This course examines the role of government in the economic system. Emphasis is placed on the analysis and evaluation of various government expenditure programs and the theories and structure of taxation. The effects of the various government expenditure and tax policies on the allocation of economic resources, production of goods and services, and the distribution of income and wealth are also discussed. Prerequisites: ECON 201 and 202 Co-listed as POLS 332. (F or Sp)

# ECON 334 Public Regulation

This course explores government's regulation of business. Antitrust and economic regulation, safety and health regulation and protection of the environment are covered. Prerequisites: ECON 201 and 202. Co-listed as POLS 334. (Sp)

# **ECON 340**

**Contemporary International Trade (g)** Students will learn why and how nations trade, and why and how people's welfare is influenced by trade. Such issues as fairness in trade, job protection, environmental regulation and international competitiveness, and industrial policy will be addressed and explored. Effectiveness of such trade policies as tariffs, quotas, voluntary export restrictions, and more will be evaluated. Pros and cons of regional trading arrangements such as NAFTA and European Economic Integration, as well as the role of the World Trade Organization, will also be discussed. Prerequisite: ECON 201.(Not offered on a yearly basis)

3 cr.

3 cr.

3 cr.

3 cr.

# ECON 342 International Finance

3 cr.

3 cr.

3 cr.

Students will learn about international monetary relations by understanding the balance of payments among nations, exchange rate systems, and factors influencing exchange rates. The importance of hedging the exchange-rate risk as well as use of exchange rate, monetary and fiscal policies in dealing with unemployment, inflation and balance of payments problems will be discussed. European monetary union, IMF, and World Bank operations and roles will be addressed. Prerequisites: ECON 201 and 202. (F or Sp)

# ECON 344 Comp Economics Systems

This course provides a comparative analysis of various world economies, including the U.S., Western and Eastern Europe, and selected Asian, African, and Latin American nations. Emphasis is on the allocation of resources, the distribution of income, and the role of the private and public sectors. Other issues include the measurement and comparison of economic performance, global economic problems, economic reform, development strategies, and the future of economic systems. Prerequisites: ECON 201 and 202. (Sp, alternate years)

# ECON 360 Science, Technology, Society and the Work Place

This course will explore the connections between science, technology and social policy, and how they can lead to drastic changes in the work force. It will explore the impact that major employment changes have had on society, and look for lessons to help students navigate their way through the rapidly changing twenty-first century work place. (F, Sp).

# ECON 361 US Economic History

An analysis of the institutions which have shaped the American economy, from pre-colonial times to the present. Included will be an examination of the interacting forces responsible for American growth and power. Prerequisite: Sophomore standing or above. Co-listed as HIST 361. (F, alternate years)

# ECON 362 3 cr. History of Economic Thought

Examines the evolution of economic theory focusing on the classical economists (Adam Smith, David Ricardo and John Stuart Mill), Karl Marx, the early neoclassicals, Alfred Marshall, Thorstein Veblen and John Maynard Keynes. The course also provides an overview of economic ideas found in pre-classical writings of the Greeks, Schoolmen and Physiocrats. In addition, modern developments in economic theory after Keynes are discussed. Prerequisites: ECON 201 and 202. (Sp, alternate years)

# ECON 378 6 cr.

Semester Abroad Research The research component of the Semester

Abroad program. A semester of directed research in a foreign country. Taken in conjunction with International Studies 377. Prerequisites: participation in the Spring Semester Abroad orientation seminar; 2.25 GPA; junior or senior standing.(F)

2-12 cr.

3 cr.

3 cr.

# ECON 379 Internship

This course is designed to allow the economics major to earn credit from practical work experience. The experience must be at a professional level and involve the application of economic concepts or techniques to a real world environment. This course can only be taken on a pass/fail basis. A maximum of 3 credits will count as electives for the economics major. Prerequisites: consent of department chair and department internship director, junior standing, and all courses required for the major except 480. (upon student request)

# ECON 389 0.5-3 cr. Special Topics in Economics

# ECON 426 Forecasting and Econometrics

A survey of forecasting techniques and econometric methods as they apply to business and economic theories. Among the techniques discussed are time-series analysis, multiple regression (matrix approach), simultaneous equations estimation, and distributed lag models. Prerequisites: Grade of C or better in ECON 326. (Sp, alternate years)

# ECON 450 Introduction to Natural Resources Economics

This is a survey course emphasizing reasons for natural resource misallocation including property rights and common property resources, externalities, and public good problems. Consideration is given to the equity and efficiency implications of public policies to direct the use of energy resources, minerals, water, forests, and fisheries. Considerable emphasis is placed on the economics of pollution control. Prerequisite: AGEC 230 or ECON 201. Colisted as AGEC 450. (F)

3 cr.

# ECON 480

# Senior Seminar

This is a writing intensive course. Students will analyze and discuss selected economic theories and issues. Writing and presentation of scholarly papers is expected. Prerequisites: ECON 301 and 302 and senior standing. (Sp)

# ECON 489 0.5-3 cr. Special Topics in Economics

A detailed study and analysis of special topics in economic theory. Sample topics: government spending and external borrowing, external debt of developing nations, women in development, feminist economics, international business and development ethics (Mexico travel seminar). Prerequisites: ECON 301 and 302 . (not offered on a yearly basis)

# ECON 499

# **Independent Study**

Students will pursue a given economic subject in depth. Prerequisite: consent of instructor.(F, Sp)

1-3 cr.

3 cr.

# ENGLISH

ENGL 20 Foundations of English	3 cr.
ENGL 21 Foundations of English Non-Native	3 cr.

# ENGL 100 Academic Reading/ Writing

Analytical and critical reading and

writing are covered. Students will learn to comprehend, interpret, and analyze oral, written, aural and visual communication; to effectively communicate ideas related to a broad range of subjects; to express ideas in a variety of formats; and to use MLA documentation. (F, Sp)

# ENGL 101 3 cr. Freshman English for International Students

In lieu of English 100, English 101 fulfills the General Education requirement for students whose native language IS NOT English.

# ENGL 200 3 cr. Investigating Ideas: Reading, Writing, and the Disciplines

Reading critically and writing persuasively are emphasized. Students will evaluate the stylistic, structural and substantive merits of what they read; they will synthesize disparate points of view in reaching judgments and constructing arguments; they will develop interpretive skills and employ various critical stances and techniques. Prerequisite: satisfactory score

**2 cr.** on the ENGL placement test or successful completion of ENGL 100.(F, Sp)

# ENGL 201 3 cr. Freshman English for International Students II

Reading and writing are employed to evaluate primary and secondary materials in the humanities, social sciences, and natural sciences. Students whose native language is not English will learn to comprehend, analyze, and interpret oral, written, aural, and visual communication in order to reach judgments and construct arguments; utilize technology to communicate effectively; perform and document research. Prerequisite: ENGL 101. (Sp)

# ENGL 202 Literature of Science Fiction

The history of science fiction starting with its roots in the nineteenth century and leading up to the present. Prerequisites: ENGL 200.(Sp, alternate years)

# ENGL 203 3 cr. Literature of the African-American Experience (d)

The course examines major writers and recurring themes in the African American literary tradition from the 18th century to contemporary writing. Focus will be given to the bicultural influences-African and Euro American-that shape both the style and content of the literature as well at the identities of the writers. Prerequisites: ENGL 100. (F)

ENGL 204	2-3 ci
Literature of the American West	

ENGL 205 War in Literature

# ENGL 206 3 cr. Ethnic Film and Literature (d) This course studies Hollywood's views of African American, Asian American, Native American and Latino/a American cultures and compares them to contemporary ethnic filmmakers' and authors' perspectives on their own cultures. Films, film clips, documentary specials, fiction, poetry and scholarly articles will be used. Co-listed as

ENGL 207 Literature of the Asian-American Experience

FILM 206. (F or Sp, alternate years)

ENGL 208 3 cr. Literature of the Native American Experience (d)

The experience of Native Americans as expressed in their literature from creation stories and early speeches to contemporary writers will be introduced. The class will discuss these writers' thematic preoccupations with their own cultural heritage, the experience of "double consciousness," the clash of values, and racial/ethnic identity. Prerequisites: ENGL 100. (F or Sp)

# **ENGL 212**

3 cr.

3 cr.

The Native American in Literature (d) This course identifies a constantly recurring major image-the Native American in literature-that helps to bring into focus and to reflect Native Americans as they were and are, as opposed to the common non-Indian views of Indians occurring from early colonial times to the present. Emphasis will be on twentieth Century literature of the "Native American Renaissance." Prerequisites: Completion of one of the following: ENGL 241, 242,243,244, or 245. (F)

# ENGL 214 Women in Literature

3 cr.

3 cr.

Study, intended for women and men, of the tradition of literature by women and its relationship to movements and periods of the mainstream male-dominated canon. Prerequisites: ENGL 111 and 112. Co-listed as WMST 214. (F or Sp, alternate years)

iven	ENGL 221	3 cr.
1	Athletes in Literature	
le		
he	ENGL 222	3 cr.
	Literature of Fantasy	
	Study of varied types of fantasy stories	5
	and novels including myth, folk tales,	
3 cr.	horror fiction, heroic fantasy and magic	cal
	realism, emphasizing the techniques,	
	conventions, themes and values of this	
3 cr.	genre. Prerequisites: ENGL 112. (F,	
	alternate years)	
	•	

# ENGL 2232-3 cr.Rags to Riches American BusinessLiteratureENGL 2243 cr.Bible as LiteratureENGL 2263 cr.Detective FictionSurvey of detective fiction from classicwriters to recent ones. Prerequisites: ENGL112.(Sp, alternate years)ENGL 2273 cr.

20th Century Russian Literature

# ENGL 228 3 cr.

Literature of Environmental Justice Environmental justice deals with the impact of environmental policies, economic practices, and political decisions on both human and natural environments. This literature explores workplace health, energy sources and indigenous rights, food production, cancer and environment. Internet links with eco-activists will give students strategies for engaging with these issues in their communities, both local and global. Prerequisite: Completed the CW general education course requirement. (F)

# ENGL 231 Short Story

Reading and discussion of short stories for the purposes of learning methods of interpretation and forming standards of criticism. Prerequisite ENGL 112.(F)

# **ENGL 232**

**Contemporary Drama** 

Survey of the literary aspects of British, American and continental drama from the mid-1950s to the present. Prerequisites: ENGL 112.(Sp, alternate years)

ENGL 233	3 cr
Introduction to Poetry	
An introduction to the form, metl	nod, and
richness of poetry. Prerequisites:	ENGL
112.(F or Sp, alternate years)	

ENGL 234	3 cr.
Modern Novels	

# **ENGL 235**

# American Autobiography: Varieties of Personal Narrative (d)

This course explores the literary, historical, and psychological structures of various forms of autobiography. Students will explore constant and changing cultural, artistic, and psychological concerns and will investigate, analyze, and appreciate the widely differing purposes of such works. The racial and ethnic diversity of American autobiography is a major emphasis in the course. Authors to be studied may include Maxine Hong Kingston, Benjamin Franklin, Harriet Jacobs, N. Scott Momaday, Audre Lorde, Mary Rowlandson, Tobias Wolff and Terry Tempest Williams. Prerequisite: English 100. (F or Sp)

# ENGL 237

Introduction to Greek Mythology

The mythology of Ancient Greece, representing the Greek world view and heroes, and its culture and mind. (Sp, alternate years)

# **ENGL 241**

# Human Issues in Literature

Important human issues in literature: innocence and experience; conformity and rebellion; men and women; dreams, obsessions and realizations; aging and death. Only one of the 240 series courses will be counted toward graduation. Prerequisite: Completion of the CW General Education Requirement. (F, Sp)

# ENGL 242 The Heroic Figure in Literature

3 cr.

3 cr.

3 cr.

2-3 cr.

3 cr.

The evolution and character of the heroic figure from ancient times to the present, with an emphasis on the tragic and comic modes. Only one of the 240 series courses will be counted toward graduation. Prerequisite: a grade of B or above in ENGL 10 or 200 sophomore standing. (F, Sp)

### ENGL 243 Types of Literature

The four traditional genres of literature (short stories, novels, poetry, and drama) are studied to emphasize the historical and cultural context and also the universal themes. Only one of the 240 series courses will be counted toward graduation. Prerequisites: Completion of English 100. (F, Sp)

# ENGL 244 3 cr. The Modern Tradition in Literature

The course is designed to acquaint students with the 18th, 19th and 20th century roots of modern literature and to acquaint them with the multiplicity of voices, in diverse genre and from diverse cultures, of modern literature. Only one of the 240 series courses will be counted toward graduation. Prerequisite: Completion of Engl 100 with a grade of B or better, or Engl 200, or Soph standing or higher . (F, Sp)

# ENGL 245

Western World Literature

Western World Literature is designed to acquaint students with the historical, philosophical and literary background of their own cultural heritage. Only one of the 240 series courses will be counted toward graduation. Prerequisite: a grade of B or above in ENGL 100 or 200 or sophomore standing.

# ENGL 250 Literature for Children

Study of representative children's books, primarily picture story books and novels, and exploration of criteria for evaluating their quality and purpose. Prerequisite: sophomore standing.(F, Sp)

# ENGL 251

# Advanced Composition

This course helps students become independent, effective, and eloquent writers who are able to use a variety of heuristics and processes appropriate to particular writing contexts and who can write original, interesting and readable prose. Prerequisites: ENGL 112 or ENGL 200.(F, Sp)

# ENGL 252

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

# Multicultural Education: Language, Media, and Philosophy

English Education majors and minors will investigate the influence of race, ethnicity, gender, religion, exceptionality, language, and learning styles on language arts instruction. The selection of leaning materials will focus on the multicultural literature and media, historical and current affairs that influence public education policies, and theories and practices of multicultural education in the United States. 20 hours of field experience required. Materials fee required. For English Education or TESOL Education majors only

# ENGL 253

# **Int Literary Studies**

Primarily for English majors and minors. The course develops competency in methods of research and in the critical analysis of literature and promotes awareness of underlying critical assumptions. Prerequisites: ENGL 200 and prerequisite or corequisite ENGL 251 or permission of the instructor.(F,Sp)

# ENGL 262 3 cr. Creative Writing

Provides extensive work in exercises and techniques of writing fiction, poetry, journals, and creative essays. Prerequisites: ENGL 112.(Sp)

# ENGL 266 3 cr. Business Writing

The forms, strategies and styles of written business communication. Emphasis is placed on the process of writing letters and reports. Prerequisites: Completed the CA requirement. (F,Sp)

# ENGL 268

**Basic Technical Writing** 

This course covers the writing process as it applies to technical documents. Emphasis will be placed on memos, letters, abstracts, and short reports, with special attention given to grammar, punctuation, and mechanics. Credit will not be given for both Eng 268 and Eng 267 (or 367 semester).

# ENGL 270 3 cr. Visual Rhetoric: Document Design and Graphics

Students will develop both analytical and practical skills needed to create visually effective documents in both paper and digital media. The course teaches students to apply theoretically based document design to academic and workplace writing and to learn the design of visual language. Prerequisites: ENGL 266 or 251. (F).

3 cr.

# **ENGL 277**

# **Experience Ireland: Culture and** Landscape

Study Irish literature, politics, history, music, art, and Irish legend and lore, including storytelling, while traveling throughout Ireland . Prerequisites: English 100. Three course orientation meetings are required prior to leaving for Ireland.

# **ENGL 279**

1 cr. **Cooperative Education and Internship I** 

An experience in which the student learns and applies basic professional skills by performing on-the-job tasks and using classroom knowledge in practical situations. Prerequisites: ENGL 112; sophomore standing, 2.5 or higher GPA; permission of English Department internship supervisor.(F, Sp,SS)

# **ENGL 289**

# **Special Topics in English**

# Topics in language, literature, writing, grammar or ESL. Prerequisite: sophomore standing. (upon student request)

ENGL 299	
Independent Writing	

# **ENGL 300** Women and Film

The history of women's cinema, prominent women directors and genres, images of women in film and feminist issues in film. Co-listed as FILM, WMST 300/500. (Sp)

# **ENGL 301 History of Film**

A survey of film history from its origin to today covering the major periods in film history by examining its innovators, major narrative forms and major theories. Colisted as FILM, HIST, JOUR, and SCTA 301. (Sp)

# **ENGL 311** Introduction to Language and Linguistics

This course makes an inquiry into the nature of language. It provides an introduction to language and its subfields: morphology, syntax, semantics, pragmatics, phonetics, and phonology. It also examines issues of language use in society and language acquisition. Prerequisite: junior standing or consent of instructor.(F)

# **ENGL 320**

# Structure of English

This course introduces the study of language, language acquisition, and language learning, focusing upon English grammar and traditional, structural, and generative- transformational approaches to grammar. Includes an overview of linguistics and an exploration of

the relationship between race/gender and language. Prerequisite: Junior standing.(F,Sp)

# **ENGL 321**

3 cr.

0.5-3 cr.

1 cr.

1-3 cr.

3 cr.

3 cr.

3 cr.

English Language: History and Culture Students will study the origins and development of the varieties of the English language from Anglo-Saxon to present forms of English as a world language. Methods of study are: 1) a structural approach to language forms; and 2) a sociohistorical approach to problems of meaning and communication rising from language change and variety. Prerequisite: Junior standing or consent of instructor.(F, Sp)

3 cr.

3 cr.

# **ENGL 322** Acquisition of Language

This course is designed as an investigation of the nature of normal language and its acquisition in children from infancy through 7 years of age; it also explores current linguistic theory and second language acquisition. Prerequisite: Junior standing. (F)

### **ENGL 324** 3 cr. Survey of American Literature I: Origins to 1900

This is a writing intensive course. This course focuses on the chief American writers who illustrate the development of American thought, life, and culture. Prerequisites: Junior standing and completion of CA requirement, ENGL 253 (or consent of instructor). (F, Sp).

### **ENGL 325** 3 cr. Survey of American Literature II: 1900-1980

This is a writing intensive course. This course focuses on the chief American writers who illustrate the development of American thought, life, and culture in the twentieth century. Prerequisites: Junior standing and completion of CA requirement (or consent of instructor). (Sp).

# **ENGL 331**

# Survey of English Literature I

This is a writing intensive course. The course is designed as a survey of English poetry, prose, and drama from the Anglo-Saxon period to the end of the 18th century. Prerequisite: completion of one of the following: ENGL 24245; ENGL 253 or permission of the instructor.(F)

# **ENGL 332**

# Survey of English Literature II

This is a writing intensive course. The course is designed as a survey of English poetry, prose and drama from the nineteenth century through the twentieth century. Prerequisite: Junior standing and completion of one of the following: CA

Requirement; ENGL 253, (or consent of instructor). (Sp)

# **ENGL 335** Shakespeare

3 cr.

Intensive study of sonnets, histories, tragedies, comedies and romances is included. The reading is organized chronologically so that Shakespeare's development as a dramatist, poet and philosopher can be traced. Prerequisites: completion of CA requirement and junior standing. (F)

ENGL 341	3 cr.
European Literature	

### **ENGL 342** 3 cr. **Development in the Novel**

### **ENGL 343** 3 cr. The Novel and Film Adaptations

This course is a survey of two popular art forms: the novel and the feature film. We will compare influential 18th, 19th, 20th and 21st century novels and their 20th and 21st century film adaptations. Following an overview of origins and significant developments, students will examine various types and techniques of both mediums and will practice comparative analysis and interpretation. Co-listed as ENGL 343/543. Prerequisite: junior standing or consent of instructor.(alternate years)

### **ENGL 350** 3 cr. **Children's Literature Issues and Trends**

Designed as a follow-up course to English 250, this course will focus on current trends and issues in children's books (censorship, sexism, racism, physical and social problems) as well as explore in greater depth such genre as poetry, folk tales and fantasy. Prerequisite: ENGL 250 or consent of instructor. (Sp)

# **ENGL 355**

3 cr.

3 cr.

# Literature for Adolescents

This is a survey course of the range of types and levels of books for adolescents along with understanding and interpretation of typical content and motifs. Evaluatory criteria are developed in relation to reading levels, quality and pertinent issues (e.g., racism, sexism, censorship challenges) Prerequisite: Junior standing or consent of instructor. (Sp)

# **ENGL 360**

# 3 cr.

3 cr.

Theory and Methodology of TESOL Introduces students to major fields in language teaching such as audiolingualism, Communicative Language Teaching. In addition to the five skill areas--grammar, speaking, listening, reading, and writing--the course will deal with bilingualism,

placement and diagnostic testing, and variables which influence language learning.(Sp)

ENGL 361	3 cr.
Composition Theory	
Students will study the theories of the	
composing process in relation to resea	rch.
Significant features of represented the	ories
are practiced to develop understanding	28
and skills. Prerequisite: Junior standin	-
consent of instructor. (F)	0
ENGL 363	3 cr.
Composition for Elementary and M	iddle
School	
ENGL 364	3 cr.
Instructions and Manuals	
ENGL 365	2 cr.
Composition: Sent Comb and Expand	
ENGL 366	3 cr.
Advanced Technical Writing	
ENGL 367	3 cr.

# **Technical Writing**

Students will study the language, methods, and formats for communicating technical information. Prerequisites: Completion of the CA requirement. (Sp)

ENGL 368	3 cr.	speake
Writing Poetry		materi
Writers explore both traditional and	1	vocabi
contemporary approaches to form a	nd will	(listen
work toward a constant series of n	ame	Comb

work toward a capstone series of poems in which they select their own techniques. Prerequisite: ENGL 262 or consent of instructor. (alternate years)

ENGL 369	
Writing Fiction	

This course builds on elements of point of view, character development, and structure introduced in 262. The course deals with various techniques in building settings, creating characters, writing dialogue, and plot. Students will conclude the course with long writing projects of their own design. Prerequisite: ENGL 262.(alternate years)

# ENGL 370

Writing Non-Fiction

Instruction and practice in writing creative nonfiction essays. Both traditional and contemporary approaches to the essay. The course will provide opportunities to read and write narration, description, expository, argumentative, autobiographical essays, and the memoir. Writers will concentrate on developing their own style of writing and voice and will conclude the course with an essay of substantial length. Prerequisite: ENGL 251 or consent of instructor. (alternate years)

# ENGL 371

# Proposal Writing: Change Through Rhetoric

3 cr.

3 cr.

3 cr.

1-3 cr.

Students learn to write proposals for a variety of contexts--business, industry, the academy, science. The course examines proposal writing from a contemporary rhetorical perspective, including various approaches to proposal writing and assists students in acquiring the power and financing to solve workplace problems and secure opportunities through future successful proposals. Prerequisites: ENGL 251 or 266 or 367. (Offered every other semester).

# ENGL 372

# Practicum: Peer Tutoring and Writing Instruction

Directed experience in tutoring to help students improve their written work and improve their general level of writing skill. The course combines lecture/discussion of relevant theories of composing and tutorial strategies with weekly application through individual and small-group sessions in the Writing Center. Prerequisite: ENGL 361 or consent of instructor.(F)

# ENGL 373 3 cr. Techniques in Tutoring: TESOL Practicum

Directed experience in tutoring non-native speakers with emphasis upon techniques/ materials available to deal with grammar, vocabulary and the four language skills (listening, speaking, reading and writing). Combines lecture and discussion with weekly application through individual and small group tutorial sessions. (F)

# **ENGL 374**

3 cr.

3 cr.

**Cyberliteracy and Writing on the Web** This course examines cyberliteracy from an ethical perspective focusing on community and culture while assisting students in publishing online texts. The course focuses on skills and knowledge demanded by online communities and cultures so students understand literacy in those contexts and can funtion as ethical and contributing members of those communities. Prerequisites: Fulfillment of CA reqwuirement. (Every third semester).

# ENGL 375 TESOL for Specific Purposes: Classrooms, Businesses and Communities

The basic skills of reading, writing, speaking and listening will be covered as will also second language acquisition, adult learners, and the variables which influence language learning. In addition, the course will provide students with the context for TESOL for work-related or community purposes. Prerequisites: Junior standing or consent of instructor. (SS)

# ENGL 376 1-3 cr. Experience Greece: Culture Past and Present

Students participating in the Greece Tour receive one to three credits of general elective credits in either English, Art or Geography. Participation in the Greece Tour Orientation Seminar (10 hours) offered during the spring semester is required. Colisted as ART 376. (Sp, SS)

# ENGL 377 1-3 cr. Field Experience

Apply the skills learned in ENGL 375/575 (see description above) in an actual work setting. For this program, participants are placed with an employer to tutor nonnative speakers of English in the workplace. Enjoy the rewards of helping workers and their families adjust to their new community and workplace. (SS)

# ENGL 378 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)

# ENGL 379 2-6 cr. Cooperative Education and Internship II

A short-term, apprenticeship (usually lasting for one semester or summer) with a business or government organization. The student learns to perform the tasks of a regular employee, applying theoretical knowledge in communication and research to practical situations. In addition, the student learns about career opportunities open to English majors. No more than 3 credits of 279 and 379 combined can be distributed as elective credits in the English major and Professional Writing minor. Additional credits can be used as electives. Prerequisites: Junior or higher standing; 2.5 or higher GPA; permission of English Department internship supervisor. (F, SP, SS)

# ENGL 382 3 cr. Writing Workshop in Prose and Poetry

This course follows a workshop format in which writers present their work and are given peer and teacher input. The class gives students the freedom to experiment with new techniques and content as well as to develop old and new projects. Prerequisite: Any of the following: ENGL 368, 369, or 370. (F, Sp, SS)

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# **ENGL 385**

# Seminar: the American Frontier

Focusing on major themes and images in the perception of the American Frontier experience, the course is a joint participation seminar with Geography and English. Sources from history, literature and geography are used. Co-listed as ENGL/GEOG 385. (Sp. alternate years)

3 cr.

3 cr.

3 cr.

cr.

cr.

cr.

3 cr.

3 cr.

3 cr.

# **ENGL 387**

# Technical and Professional Editing

Students will examine the general principles and practices of sound editing of and for writing in the workplace. The course prepares student in all aspects of editing documents, from proofreading for surface errors to ensuring appripraite content, organization, visual elements or components, and usability, needed for editing task in the workplace. Prerequisites: ENGL 251 or 266 or 367.

# ENGL 389 0.5-3 cr. Special Topics in English

# ENGL 420

**Pedagogical Grammar** English 420/620 builds upon the fundamental knowledge students gain in English 320/520. In addition to identifying grammatical structures and patterns, students will focus upon explaining their use in specific rhetorical settings. Prerequisite: ENGL 320. (F)

ENGL 421	3
Chaucer	
ENGL 422	3
Elizabethan and Jacobean Drama	
ENGL 423	3
17th Century Prose and Poetry	

ENGL 424 Dram/Nov Rest and 18th Century

ENGL 425	3 cr.
<b>British Literature: Romantic Period</b>	

# ENGL 426 Victorian Literature

The impact of science, the rise of industrialism and expanded democracy, the changing roles of women in the poetry, novel, and non-fictional prose of the age are investigated. Prerequisites: junior standing and ENGL 332 or consent of instructor. (alternate years)

# **ENGL 427**

# British Literature: 1890-1940

An intensive examination of British literature from 1890 to 1930 including fiction, poetry, drama and criticism. Prerequisites: senior standing and ENGL 332 or consent of instructor. (alternate years)

# ENGL 428 3 cr. British Literature: 1940-Present

Poetry, novels, plays and essays of the contemporary period are examined. Prerequisites: completion of one of the following: junior standing, ENGL 332 or consent of instructor.(alternate years)

# ENGL 429 3 cr. American Renaissance

Study of major authors and themes from the American Renaissance or Romantic Period in American literature. Prerequisite: junior standing, ENGL 324 or consent of instructor. (alternate years)

# ENGL 430

# American Realism

Major authors and themes from the Realistic period in American literature (1865-1914) will be examined. Prerequisite: junior standing, ENGL 325 or consent of instructor.(alternate years)

# ENGL 431 Modern American Fiction

The major American fiction writers from 1914-1945. Prerequisite: junior standing, ENGL 325 or consent of instructor. (alternate years)

# ENGL 432 3 cr. Contemporary American Literature Study of a number of American writers of fiction, poetry, and drama from 1945 to the present, with emphasis on variety in style and subject matter. Prerequisites: completion of general studies humanities/ literature requirements and junior standing, ENGL 325 or consent of instructor.

(alternate years) **ENGL 441 3 cr.** 

**20th Century International Literature** Organized around themes such as Love and Death and Tradition and Change, this course will examine the universality and

temporality of literary works by significant writers from around the globe (excluding Britain and the USA) and from early to contemporary literature. Prerequisites: completion of General Education humanities and literature requirement; junior standing or consent of instructor. (Sp)

# ENGL 442 World Cinema (g)

View the world through many nationsA? cultural and historical vantage points, and increase your facility with film language, artistic form and the worldA?s cultures for your studentA?s benefit and your own enjoyment. (F, or Sp, alternate years)

# **ENGL 443**

# American Ethnic Women Writers (d)

3 cr.

3 cr.

3 cr.

A study of representative American women writers of high literary merit representing Black, Native American, Asian, and Hispanic backgrounds. This course will explore the racial, ethnic, and sexual oppression experienced by women of color in American history as it is expressed in literature. The emphasis will be on twentieth-century literature, with special attention to a basic American literary theme: the search for personal identity. Co-listed as WMST 443/643. Prerequisite: Senior standing and completion of CA requirement. (F, or Sp, alternate years)

### **ENGL 444**

3 cr.

3 cr.

# **Major Authors**

This course will focus on the creative works of one or two authors as well as the biographical, social, and critical contents of these works. Prerequisite: ENGL 253 or consent of the instructor.(offered on student request)

# ENGL 448

**Teaching Film in the Secondary School** This course focuses on the teaching of film in the Language Arts curriculum. Film language, artistic form, narrative structure, and communication structure will be used as a foundation for the analysis of films. The course will explore film theory, film genres, film types, social values and ethics, and the relationship between film and culture. The course will require students to create a curriculum project. Co-listed as FILM and SCTA 448/648. (SS)

# **ENGL 450**

3 cr.

Non-Native Speakers in the Midwest Introduces the students to the cultural and language factors which affect the performance of students who are nonnative speakers of English with focus on specific language and cultural groups in the Midwest, particularly Wisconsin and Minnesota. (SS)

# **ENGL 455**

3 cr.

3 cr.

1-2 cr.

Adolescent Literature:Issues and Trends Designed as a follow-up course to ENGL 355/555, this course will focus on current issues (censorship, sexism, racism) and trends in literature for adolescents. Prerequisite: ENGL 355/555 or consent of instructor. (SS upon student request)

# ENGL 461 Evaluation of Writing

This course will focus on the evaluation of writing as part of the composing process. Various evaluation techniques will be discussed and practiced to establish their application and function and to develop skills. Prerequisite: ENGL 361 or teaching experience. (SS, not offered on a yearly basis)

# ENGL 471 Issues in Bilingualism

The history and early research on the development of bilingual schooling in the United States, the individual and social nature of bilingualism, development of bilingualism, bilingual language acquisition, and bilingual education policies and classroom practices in the U.S. and abroad. (alternate years)

# ENGL 482

Writing Seminar in Fiction and Poetry

The course follows a workshop format. Students may choose to work in either fiction or poetry, and will present their work for group discussion and commentary. The amount of credit will be determined by the amount of work the student plans to do. Prerequisites: any of the following: ENGL 262, 368, 369, 370 consent of instructor, or experience as a teacher of writing. (alternate years)

# ENGL 489 Special Topics in English

0.5-3 cr.

1-3 cr.

1 cr.

Ian McKellan as a 1930s Richard III who likes jelly beans; Ethan Hawke as a corporate Hamlet; Anthony Hopkins and Jessica Lange in a time-traveling Titus Andronicus; and a Branagh production of much Ado About Nothing set in Kyoto, Japan. These and other recently produced films of ShakespeareA?s plays will be examined, along with some of the oldies and some of the adaptations of the plays, like West Side Story (Romeo and Juliet) and A Thousand Acres (King Lear). The course will focus on both literary interpretation and analysis of cinematic procedures. (upon student request)

ENGL 490	3 cr.
Readings	

# ENGL 499 Independent Study

Independent study is restricted to junior and senior majors and minors unless permission for an exception is granted by the chairperson of the department. Prerequisite: junior or senior English major or minor. (F, Sp)

# **ENVIRONMENTAL STUDIES**

# ES 100

Freshman Seminar

The course is required for the Environmental Science major and should be taken during an Environmental Science major's first year at UWRF. The course includes presentations by environmental scientists, faculty and staff in the Environmental Science major, Career Services, Information Technology Services and the Library. The emphasis will be on defining the scope of environmental science, learning about careers in environmental science and utilizing resources essential for environmental scientists. (F)

# ENVIRONMENTAL SCIENCE AND MANAGEMENT

# ESM 100

3 cr.

3 cr.

Introduction to Recreation and Park Management

2 cr.

3 cr.

2 cr.

3 cr.

# ESM 105

**Introduction to Environmental Studies** This course presents an overview of the interrelationships between humans and the environment. The material presented in the first one-third of the course focuses on important ecological concepts. The remainder of the course deals with human influence on the environment. The ecological concepts are used throughout to identify, understand, and provide a basis for proposing possible solutions to contemporary environmental problems. Overall, this course will provide the student with a better understanding of how humans can more positively affect the environment in which they live.(F, Sp)

# ESM 109 Introduction to Forestry

The course introduces the science and practice of forestry to students with little or no previous knowledge of the subject. The material presented will provide an overview of forestry so as to inform the student of basic concepts, terminology, practices, issues and opportunities.(F, Sp)

# ESM 151 3 cr. Introduction to Land Use Theory and Practice

This course introduces land use planning history, as well as current theories and methods. Important physical, natural, and spatial components will be included by incorporating a capability analysis approach to determine proper development options based on site characteristics. Rural and urban development patterns are studied along with local land use controls, including zoning ordinances and subdivision regulations.(F, Sp)

# ESM 220 Env Sust: Theory/Issues and

# Management

This course presents an essential foundation for critical thinking and professional development in the environmental science

and management field. The course explores the broad spectrum of philosophical, historical, and technical issues pertaining to the management of natural resources and the people using those resources in a sustainable manner. Selective topics will include a critique of professionalism, sustainable development, environmental ethics, biodiversity, environmental quality standards, risk management, cost/benefit analysis, carrying capacity, limits of acceptable change, and ecosystem management. It will also focus on administrative structures currently in place for selecting the appropriate management responses necessary to address the complexity of environmental and social circumstances faced by governmental and non-governmental agencies. Prerequisite: ESM 105 and 151, or consent of instructor. (Sp)

# ESM 270 Internship I

This course entails an off-campus occupational work experience for the student. It involves full-time or part-time employment with a cooperating agency or firm to enhance career development and placement. Prerequisites: 30 cr. and consent of director and faculty coordinator.(F, Sp, SS)

2-4 cr.

4 cr.

3 cr.

# ESM 271 International Internship

An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Special course fees required. Prerequisites: 30 semester credits. (F, Sp, SS)

ESM 289 0.5-3 cr. Special Topics in Resource Management

# ESM 300 Environmental Education

This course is designed to meet the certification requirement for teacher education candidates as specified by the state of Wisconsin Department of Public Instruction Environmental Education rule. The course will investigate the following environmental issues: the ecosystem, population, food production, energy, natural resource depletion, land use and misuse, and sources of environmental impact. Teaching methodologies will be presented to incorporate environmental content into the curriculum. Field trips required. Colisted as GEOG 300/500. Special course fee required. Prerequisites: Junior standing required and TED 211 or 212 or consent of instructor. (F, Sp, SS)

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# ESM 301

# Foundations of Outdoor Leadership

Designed to provide an overview of the philosophy, history, programming and leadership of outdoor adventure education (OAE), this course will: 1) analyze how OAE has evolved as a medium for individual and group development; 2) familiarize students withthe standard programs of Outward Bound, the National Outdoor Leadership School and special focus on the curriculum of the Wilderness Education Association; 3) examine the theory and practice of leadership in OAE with emphasis on judgment and decisionmaking; and 4) provide practical lab experiences that will enhance student leadership ability when applied to group dynamics, wilderness tripping logistics and other skills. Special course fee required. Co-listed as PED 301. (F)

### ESM 303

# Environmental Policies and Administration

This course provides in-depth analyses of natural resource and land use planning policies and their formulation at the various levels of government. The historical development and current framework of public policy are investigated and specific foundational legislation critiqued. Prerequisite: ESM 151. (F)

# ESM 305

# **Environmental Impact Assessment**

Fundamentals of environmental impact assessments including basic documents, document processing, and agency and public involvement in the assessment process. Preparation of environmental impact statements, environmental assessments, phased site investigations and environmental audits are discussed. Key elements of impact analysis are presented on specific environmental topics including water resources, air quality, environmental health and safety, wildlife and wetlands. Prerequisites: ESM 105, Chem 121 or Chem 111 and Chem 116, Biol 100 or 150, Geol 101.

# ESM 307 Cultural Perspectives on the Environment

This is a writing intensive course and meets the diversity requirement. This course focuses on the holistically integrated relationship of humans with their environment - both social and natural. The course examines cultural conflicts over land, water, food, wildlife and pollution on a local to global scale. Concepts to be explored include, but are not limited to: biophilia; carrying capacity, deep ecology; diversity; ecofeminism; environmental community, ethics and justice; Gaia Hypothesis; property rights; sustainable agriculture and development; and individual responsibilities regarding the environment. The full spectrum of American cultural identity delineations including race, ethnicity, gender, age, disability, religion, rural/urban, and others will be used to demonstrate how various cultural groups value, use, and share and/or control the social and natural environment. Prerequisite: Junior standing or consent of instructor. (F, Sp)

# ESM 321

3 cr.

3 cr.

2 cr.

3 cr.

**Recreation Res Prog** 

### ESM 333

**Remote Sensing of Natural Resources** The fundamentals of remotely sensed data are presented including acquisition and interpretation methods of ground, aerial, and orbital systems. Emphasis is placed on the use of this data for environmental studies and land use planning applications. Hands-on assignments are used to familiarize students with current photogrammetric and interpretation techniques. Prerequisite: GEOL 101 or SOIL 210. (Sp)

# ESM 335 Interpretive Services

# ESM 343 Woodlot Management

This course provides the student with the basic information necessary to manage a woodlot. The primary emphasis is on maximizing timber production. Other concerns such as wildlife, aesthetics, water resource protection and recreation are also considered. Topics in this course include: measuring a woodlot, treatments to improve woodlot productivity, government programs to assist forest landowners, timber sales and development of a management plan. The labs involve visiting a variety of different woodlot situations to illustrate and apply concepts presented in class. Prerequisite: ESM 109 or consent of instructor. (F)

# ESM 360 Hydrology and Water Quality

The course is a study of the hydrologic cycle with emphasis on precipitation measurement and analysis, estimation and prediction of surface runoff, evaporation and evapotranspiration processes, and storage and movement of surface water, soil water and groundwater. Role of lakes and wetlands in the hydrologic cycle is discussed. Impact of point and nonpoint sources on surface water and ground water quality are considered.(F, Sp)

# ESM 363

# Geographic Information Systems Applications in Resource Management

Geographic information systems (GIS) theory and case studies analysis are incorporated to present current applications of this technology to resource management and land use planning. Topics include an overview of GIS data models, as well as data entry, spatial query analyses, and statistical analysis techniques. Prerequisites: GEOG 250, 360 or consent of instructor. (Sp)

# ESM 365

3 cr.

3 cr.

3 cr.

3 cr.

4 cr.

3 cr.

3 cr.

# **Interpretive Services**

This course is designed to provide the student with the philosophical, theoretical and practical foundations for designing and implementing a wide variety of interpretive media in support of park management and environmental education objectives. Emphasis will be placed on hands-on skill development in a broad spectrum of methods, mediums, settings and issues. Prerequisite: ESM 220 or consent of instructor.(Sp, alternate years)

# ESM 370 Internship II

# 2-4 cr.

3 cr.

An additional off-campus occupational work experience for the student. Involves full-time or part-time employment with a cooperating agency or firm. Prerequisites: Ag. 270 and consent of director and faculty coordinator. (F, Sp, SS)

# ESM 375 4 cr. Introduction to Geographic Information Systems

# ESM 377

# **Business Ecology**

This course will provide the student with the understanding of environmental trends associated with the greening of business and industry, and the environmental management systems (EMS) and strategies that can be applied to associated issues. The course will address current trends in sustainable development, industrial ecology, pollution prevention, the ISO 14000 Series, environmental performance indicators, environmental auditing, EMS corporate structure, life cycle management, risk analysis and management, professional certification, and related ethical considerations. Case studies, guest speakers, expert systems, field trips, stateof-the-art software, and current literature will be used with lecture and discussion to illustrate how large corporations and practicing professionals are addressing these issues. Prerequisites: ECON 100 or up, or AGEC 230; ESM 105; and junior standing; or consent of instructor. (Sp)

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# .

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# ESM 378

# 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)

# ESM 389

**Special Topics in Resource Management** 

0.5-3 cr.

3 cr.

4 cr.

3 cr.

# ESM 393

**Comprehensive Planning** 

The framework and methodologies of comprehensive planning are explored in detail and presented within the contexts of Wisconsin's Smart Growth initiative and as it applies to natural resources management. Comprehensive plan elements are identified, along with data gathering, analysis, and integration procedures. First had experiences in formulating comprehensive plans are included. Prerequisites: ESM 151 and 305, or consent of instructor.

# ESM 411

Site Planning and Development

This course examines the concepts and skills necessary to plan for development of the full spectrum of zoning possibilities encountered, primarily in an exurban area. Primary attention will be focused on conservation development of residential areas with moderate coverage of agricultural, recreational, commercial, and industrial sites. Site planning principles, layout, and design will be applied within the context of master and comprehensive plans, and the notion of sustainable development. Permitted and conditional uses, setbacks, and other criteria of various zoning districts will also be integrated. The student will prepare and publicly present a full set of maps and a planning document for a local community site. Prerequisites: ESM 151, GEOG 250, 360 and GENG 235, or consent of instructor. (F)

# ESM 412

### **Fate and Transport**

The course includes study of the physical and chemical behavior of environmental contaminants, the governing principles of contaminant migration and the impacts of contaminants on major environmental media: surface waters, ground waters, soil and the atmosphere. Topics will also include primary sources of contamination as well as human health and economic impacts. Prerequisites ESM 105, CHEM 122 or 112/117, BIOL 100 or 150, MATH 147 or 166. A course in statistics is suggested.

# 3-6 cr. ESM 413

# **Environmental Analysis**

The course includes study of environmental pollutants, sources of contamination, health and economic impact, methods of control and remediation; Emphasis will be on water, soil and air quality sampling for organic and inorganic pollutants using established protocols for collection of legally defensible data, applicable regulations in risk evaluation, principles of project management, data analysis and reporting. Prerequisites: ESM 105 or GEOL 101, CHEM 112, 117, BIOL 100, MATH 147 or 166. A course in statistics is suggested. (SP)

# ESM 435 Advanced Land Use Planning and Design

Advanced land use planning theory and methods are presented through a comprehensive study of development patterns in an exurban and regional context. A view of land use controls including acquisition procedures, capital improvements programming, tax controls, and transfer of development rights will be presented. Conflicts between rural and urban land uses are also studied along with the roles of strategic and master planning to minimize their impacts. Laboratory exercises are used to gain firsthand knowledge of the processes. Finally, the role of the professional planner in today's society is examined. Prerequisites: ESM 151, 303 (Sp)

### ESM 436 1 Fall Wildland Education Workshop

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# ESM 438

**Workshop Environmental Education** The course is a summer workshop designed to allow the student an extended experience in environmental awareness. Teaching techniques, activities and new materials will be made available for use outdoors. This includes plant, animal and earth science related activities. Prerequisite: junior standing. (SS)

ESM 447	1-3 cr.
Fall Wildland Education Wo	orkshop
ESM 481 Wisconsin in Scotland	12-12 cr.

ESM 485 1 cr. Seminar: Resource Management This is a writing intensive course. This

course provides resource management majors the opportunities to conceive, research, organize, and communicate their findings in both a technically written report and formal seminar presentation. Employment preparation activities, including resume writing and interviewing skills development will be incorporated. Prerequisite: senior standing. (F,Sp)

# ESM 489 0.5-3 cr. Special Topics in Resource Management

# ESM 490

Independent Study

4 cr.

4 cr.

1-3 cr.

1-3 cr.

Students will pursue independent field problems, laboratory work or library research. Prerequisites: junior or senior standing and consent of instructor. (F, SP)

# **ETHNIC STUDIES**

# ETHN 200 Ethnic Studies (d)

The study of inter-ethnic group differences as a field of inquiry. Emphasis will be placed on theories of race, ethnicity and inter-ethnic relations. Emphasis will also be placed on the social and historical experiences of various racial and ethnic groups within the United States. (F)

# ETHN 270

# **Puerto Rican Society**

Study of the formation and development of the Puerto Rican people from the 15th century to the present. Study of the genesis of an ethnic group through its literature, music and art. Attention will be given to the struggle for national identity, economic development, and the transcultural link between Puerto Ricans and U.S. society. Prerequisite: Sophomore standing and above.

# ETHN 279 1 cr. Cooperative Education and Internship I

An experience in which students learn and apply basic professional skills by performing on-the-job tasks and using classroom knowledge in practical situations. This experience will be evaluated on a pass/fail basis. If the student is in the Cooperative Education Program, then this course precedes ETHN 379. Prerequisite: sophomore standing and permission of Ethnic Studies Coordinator. (F, Sp, SS)

# ETHN 289 0.5-3 cr. Special Topics in Ethnic Studies

# ETHN 377 Field Experience

Ethnic Studies minors who receive approval to apply international study credits (other than Semester Abroad Research credits see ETHN 378) or domestic field experience credits to the Ethnic Studies minor should register for this course. The course is designed to give academic credit for appropriate projects involving

3 cr.

3 cr.

1-3 cr.

international travel or domestic field experience. Prerequisites: completion of the application process (in consultation with the coordinator of Ethnic Studies and in the case of an international study program, with the director of the program) and ETHN 200 or consent of the coordinator. (F, SP)

# **ETHN 378** 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)

# **ETHN 379**

**Cooperative Education and Internship II** Ethnic Study minors who receive approval to apply government agency or ethnicadvocate-group internship credits to the Ethnic Studies minor should register for this course. The course is designed to give academic credit for appropriate internships. Prerequisites: Completion of the application process in consultation with the Ethnic Studies coordinator and ETHN 200 or consent of the coordinator. (F, Sp, SS)

# **ETHN 382**

Ethnic Groups in Secondary Curriculum

# **ETHN 389 Special Topics in Ethnic Studies**

The course focuses on a selected issue of topical importance to American ethnics. Examples might include "African-American and Korean American Conflict, " "The 'Model Minority" "Native American Treaty Right," "Hmong Settlement in the Midwest," "Bilinual Education in the U.S." (offered as opportunities present)

# **ETHN 480**

# Seminar: Ethn/Gender

An interdisciplinary study of the ways in which human subjectivities are constructed through the categories of gender, race, ethnicity, sexuality and class in American culture. Prerequisite: ETHN 200 or WMST 200 or consent of instructor. (Sp, odd years)

### **ETHN 489** 0.5-3 cr. **Special Topics in Ethnic Studies**

# **ETHN 499**

# **Independent Study**

For minors in Ethnic Studies who desire some special experience and background relating to Ethnic Studies. Prerequisites: ETHN 200 and minor in Ethnic Studies. (F, Sp)

# FOOD SCIENCE

# **FDSC 110**

The Science of Food

Science of Food offers students unique opportunities to learn where their food supply comes from, how the food is produced and how consumption is met on a global basis. Applying basic science principles to the production of food will enhance student's ability to better understand the phenomena of food production.

# **FDSC 113**

3-6 cr.

3-12 cr.

3 cr.

3 cr.

1-2 cr.

0.5-3 cr.

Introduction to Food Science Laboratory A laboratory study of common methods of food preservation, chemical preservation, canning, freezing, dehydration, packaging and sensory evaluation. Laboratory manual required. (F, Sp)

### **FDSC 120** Food and Consumerism

Discussion of current issues involving foods and the food industry of concern to the consumer. The course provides an overview of the food industry, food hazards and safety of prepared foods. Impact of food industry trends on consumers including food regulations and consumers' rights will be analyzed.(Sp)

# **FDSC 201 Dairy Manufacturing I**

# **FDSC 202**

**Dairy Manufacturing I** 

The introduction of scientific principles including chemistry and microbiology to the processing of fluid milk and milk products and their control. Demonstration of basic processing operations will include heating, cooling, homogenization, evaporating, drying, crystallization and freezing. Co-listed as ANSC 202. (F)

# **FDSC 212** Food Processing II

### **FDSC 238**

# **Meat and Meat Products**

An introductory course in Meat Science where students will learn the basic procedures and practices employed for conversion of livestock to final retail product. Particular emphasis will be given to factors influencing final eating quality and product safety. In addition, the scope, size, and current challenges to the meat industry will be discussed. Prerequisites: ANSC 111 or FDSC 112 and CHEM 110 or 121. (F, Sp)

3 cr.

# **FDSC 240** Meat Product Processing

The study and practice of commercial meat processing methods including curing, smoking, sausage manufacturing and the manufacture of ready-to-serve meat products. Prerequisite: FDSC 140. Co-listed as ANSC 240.(Sp)

# **FDSC 259 Cereal Technology**

The structure and composition of cereal grains and oil seeds in relation to milling and extraction processes and production of starches, flours and milling by-products will be explored. The course includes detailed discussion of cereal technologies such as baking, malting, brewing, extrusion, fabricated foods, breakfast cereal and pasta manufacturing as well as novel protein sources and applications. Prerequisite: FDSC 112. (Sp, alternate years)

# **FDSC 270** Internship I

A full-time occupational work experience with a cooperating agency or firm. Prerequisites: 30 cr. and consent of the faculty coordinator. (F,Sp,SS)

# **FDSC 271**

4 cr.

2-4 cr.

# **International Internship** An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Special course fees required. Prerequisites: 30 semester credits. (F, Sp, SS)

# **FDSC 285**

Seminar: Food Science

1 cr.

The seminar sequence provides a unique opportunity for Food Science students to practice professional communications and to gain exposure to new concepts and developments in the field through presentations by peers, faculty and outside speakers. (F,Sp)

FDSC 289	0.5-3 cr.
Special Topics in Food Science	
FDSC 301	3 cr.
Dairy Manufacturing I	
FDSC 302	3 cr.
Dairy Manufacturing II	
This course includes an integration	on of
chemical, microbiological and ph	iysical
principles involved in the manufa	acture and
storage of cheeses and cultured p	roducts.

**FDSC 304** 2 cr. **Quality Milk Production and Processing** 

Prerequisite: FDSC 202. (Sp)

3 cr.

2 cr.

3 cr.

3 cr.

4 cr.

3 cr.

# 166

# FDSC 312 Food Processing

This course introduces conventional and novel processing and preservation techniques. Discussion topics include unit operations, thermal processing, concentration and dehydration, refrigeration and freezing and novel processes such as high hydrostatic pressure and pulsed electric field technologies. Prerequisite: FDSC 112 and one of the following: FDSC 140, 202, or 259. (F)

# FDSC 313 Food Processing Lab

A laboratory course that teaches the food processing principles and techniques, using pilot plant equipment. The students will complete a laboratory project that will include computer-based literature search and written reports. Co-requisite: FDSC 312. (F)

FDSC 320	2 cr.
Food Quality Assurance	
Factors affecting the quality of food	
products such as appearance, flavor,	
texture, nutritional value, safety and	
wholesomeness. The organization of	
quality control with emphasis on TQM	I and
HACCP. Principles of Statistical Quali	ity
Control. Prerequisites: FDSC 312 and	
ANSC 341. (Sp)	

FDSC 322 Food Sanitation	2 cr.
FDSC 331 Human Nutrition	1 cr.
FDSC 335	4 cr.

# Food Microbiology

Microbiological aspects of preservation, processing, quality, safety and shelf-life of foods will be studied. Methods for isolation, detection, characterization and quantitative determinations of microbial populations in foods and the food plant environment as well as factors influencing growth and survival of spoilage and pathogenic organisms in foods will be examined. Prerequisite: AGBI 251 or CHEM 361 and BIOL 324. (F, SP)

# FDSC 352

**Food and Process Engineering** Engineering concepts applied to food processing will be explored. Conversion of physical dimensions, mass balance, heat transfer, mass transfer, and process control technology. Co-listed as FDSC 352. Prerequisites: PHYS 151 and FDSC 112 or AGEN 150.(F)

3 cr.

# 4 cr. FDSC 360 Food Chemistry

1 cr.

The molecular behavior of basic constituents common to food products are examined with respect to structure and properties. Also discussed is the chemistry of changes occurring during processing, distribution and utilization. Prerequisites: AGBI 251 or CHEM 361.(F)

3 cr.

2-4 cr.

# FDSC 370 Internship II An additional occupational work

experience for the student which involves full-time employment with a cooperating agency or firm. Prerequisites: FDSC 270 and consent of the faculty coordinator. (F, Sp, SS)

FDSC 378 Semester Abroad Research	3-6 cr.
FDSC 379 Semester Abroad	6 cr.
FDSC 385 Seminar: Food Science	1 cr.

The seminar sequence provides a unique opportunity for Food Science students to practice professional communication and to gain exposure to new concepts and developments in the field through presentations by peers, faculty and outside speakers. (F,Sp)

FDSC 389 Special Topics in Food Science	0.5-3 cr.
FDSC 411 Advanced Food Processing	3 cr.
FDSC 421 Principles of Sensory Evaluation	3 cr.

FDSC 422 4 cr. Product Development and Sensory Evaluation of Foods

This course has been designed as the Food Science capstone course. As such it will integrate concepts from foundation and major courses to stimulate critical thinking and logical problem solving skills within the context of food product development and sensory evaluation. Prerequisites: ANSC 341, FDSC 312, 335, 353 and 360. (Sp)

FDSC 423 Food Product Development	3 cr.
FDSC 425 Food Law	3 cr.
FDSC 435	3 cr.

# **Advanced Food Microbiology**

Critical review of current topics in Food Microbiology including food borne pathogens, toxins, rapid and automated methods for detection, isolation and characterization, food fermentation with special emphasis in biotechnology, and genetic engineering aspects of microbial cultures. Prerequisite: FDSC 335 or consent of the instructor. (Sp, alternate years)

# **FDSC 436** 3 cr. Food Toxicology **FDSC 437** 1 cr. Food Safety and Quality Assurance **FDSC 450** 3 cr. Senior Capstone - Food Science **FDSC 460** 3 cr. **Fermentation Technology** Introduction to industrial fermentation processes, fermenter systems and biotechnology applications. Manufacturing food ingredients, antibiotics, vitamins and industrial enzymes will be discussed. Prerequisite: FDSC 335. (Sp)

# FDSC 461 4 cr. Food Analysis

To acquaint the students with the proper sampling, handling, and analysis of food products. The course will also include new methods used for food analysis. Prerequisite: AGBI 251 or FDSC 360 or CHEM 361.(Sp)

# FDSC 4692 cr.Dairy Plant ManagementThis course is designed to prepare studentsin dairy plant operation and management.Equipment design and specifications will

Equipment design and specifications will be examined. Prerequisites: FDSC 202,302. (Sp)

1 cr.

# FDSC 470

**Dairy Plant Management Lab** Hands-on experience in dairy manufacturing, quality control, and management in a dairy plant setting. Students will participate for approximately three hours per week performing various tasks related to the operations and management of the dairy plant. Prerequisite: FDSC 469 or by permission. (F, Sp)

# FDSC 480 2-3 cr. Special Problems

# FDSC 485 1 cr. Seminar: Food Science

The seminar sequence provides a unique opportunity for Food Science students to practice professional communication and to gain exposure to new concepts and developments in the field through presentations by peers, faculty and outside speakers. (F, Sp)

# FDSC 489 0.5-3 cr. Special Topics in Food Science

# FDSC 490 1-3 cr. Special Problems in Food Science

Students will study problems in areas of food science and technology. Prerequisites: junior or senior standing and/or consent of instructor. (F,Sp,SS)

# FILM STUDIES

# FILM 160

# **Television Studio Production**

The student will learn and perform all functions within the television studio, including directing, switching, audio, graphics, camera and related functions. Television writing techniques and formats, elementary engineering terminology and theory will be discussed. The role and function of each member of the production team will be discussed. Each student will write, direct and produce his/her own video production. Prerequisite: JOUR 101. Colisted as SCTA 160.(F)

# **FILM 200**

# Introduction to Film Studies

This course is an introduction to film language, art, style, technology, and analysis. It provides an historical overview and background on film theory. Students will view and critique films showing a variety of styles and techniques. Co-listed as FILM 200. (F)

# **FILM 206**

# Ethnic Film and Literature (d)

This course studies Hollywood's views of African American, Asian American, Native American and Latino/a American cultures and compares them to contemporary ethnic filmmakers' and authors' perspectives on their own cultures. Films, film clips, documentary specials, fiction, poetry and scholarly articles will be used. Co-listed as FILM 206. (F or Sp, alternate years)

# **FILM 232**

# Makeup for Theatre, Film and Video

This course includes theory and extensive practice in the skill of makeup application for roles in all media. Makeup kit is required. Prerequisite: SCTA 131, Design for the Theatre or consent of instructor. Colisted as FILM 232. (Sp, alternate years)

# **FILM 245**

# Writing Film and Television

Techniques in writing for the documentary/ factual film, feature films and television will be examined. (SP,alternate years)

# FILM 248 Cultures in Conflict

This course focuses on film as a medium which examines conflicts resulting from cultural differences. At the center of good narrative film structure is conflict. This conflict will be explored through the film's language content and persuasive qualities, as well as how it provokes audience reactions. Co-listed as FILM 248. (SP, alternate years)

# FILM 260

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

**Electronic Field Production** Students will examine, understand and perform procedures, policies and practices applied to television field production. Students acquire skills and knowledge in all areas of EFP for television including pre-production tasks, lighting and shooting in the field, and editing. Students will learn the theory and practice of directing/writing, producing commercials, public service announcements (PSA) and infomercials. Co-listed as SCTA 260. (Sp)

# FILM 261

**Electronic Media Copy Writing** This class will examine the theory and skills involved with writing techniques for commercials, public service announcements (PSA) and infomercials for adio and television, as well as nonmedia applications such as corporate video. Students will learn and apply principles of persuasion toward the writing of continuity programming. Techniques for needs assessment of clients as well as market and product reasearch will be discussed. Colisted as SCTA 261. (Sp)

# FILM 279 1 cr. Cooperative Education and Internship I

FILM 289 0.5-3 cr. Special Topics in Film Studies This course addresses a variety of topics in

Film Studies. See ENGL 289 and MODL 289 for specific offerings (occasionally)

# **FILM 300**

# Women and Film

The history of women's cinema, prominent women directors and genres, images of women in film and feminist issues in film. Co-listed as FILM, WMST 300/500. (Sp)

# FILM 301 History of Film

Film Studies 301 is a survey of film history from its origins to today. The course will cover the major periods in film history by examining its innovators, major narrative forms, and major theories. The course will also look at the film industry and international influences. Co-listed as ENGL, HIST, JOUR, and SCTA 301. (Sp)

# 3 cr. FILM 302

# History of Documentary

This course examines the history and techniques of the non-fiction film. It involves analysis of historical examples of documentary film (including newsreels, propaganda films, and television documentaries) along with the works of prominent documentary makers and styles of documentary production, Co-listed as JOUR 302. (F, alternate years)

# **FILM 303**

3 cr.

3 cr.

1-3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

**Documentary Production** An examination of the principles and techniques used in creating political, educational and social commentary documentaries. Emphasizes the skills needed to research, write, and produce a TV or radio documentary from concept to finished product focusing on research, preproduction planning, and shooting/ recording, editing and presentation. Prerequisite: Jour 121 or 122 or Film 260 or SCTA 260. Co listed as FILM 303 and SCTA 303.

# FILM 305

# News in the Movies

American films illustrate the public's love/hate relationship with journalism. Reporters are portrayed as "good guys" (crusaders, detectives, heroes) and "bad guys" (scandalmongers, drunks and villains). The course will focus on the changing image of journalists from early to recent movies and the effects those images have on public perception. Co-listed as FILM 305. (SP, alternate years).

# FILM 310

# Sociology Through Film

Film is used to explore and demonstrate the relevance of sociological thinking. Taking an active role, students will learn to go beyond the directorA?s theory of the plot and the character's motivations, and analyze it with their own sociologically informed perspective. As critics, students are encouraged to draw sociological meaning from the film that the film-makers may not have intended. Co-listed as SOCI 310 (prerequisites SOCI 100 or ANTH 100 or FILM 200 or Consent of Instructor; as offered).

# **FILM 315**

3 cr.

**Classic and Modern German Film** German classic and new wave film is examined for cultural, artistic, and linguistic merit. Films based on literary masterpieces of writers such as Schiller and T. Mann are studied as well as films created in the last 25 years by new wave directors Herzog, Wenders, and Schlondorff. Prerequisite: GERM 202. Co-listed as GERM 315. (F)

# **FILM 316**

# **History of French Cinema**

The course charts the beginnings of French cinema at the turn of the century and provides an overview of key films and movements up to the present day. Prerequisites: French 301 or equivalent, or permission of the instructor.

# **FILM 343**

# The Novel and Film Adaptations

This course is a survey of two popular art forms: the novel and the feature film. We will compare influential 18th, 19th, 20th and 21st century novels and their 20th and 21st century film adaptations. Following an overview of origins and significant developments, students will examine various types and techniques of both mediums and will practice comparative analysis and interpretation. Co-listed as ENGL 343/543. Prerequisite: junior standing or consent of instructor.(alternate years)

# **FILM 360**

**Corporate Electronic Communication** The course will examine the actual techniques used to create effective corporate videos and infomercials. All elements of pre-production, production, and post-production will be discussed and then performed by students. Discussions of current trends of teleconferencing and satellite communication will be included. Non-linear video editing will be discussed and explained. Prerequisite: SCTA 260. Co-listed as FILM 360. (F, odd numbered years)

# **FILM 379**

# **Cooperative Education and Internship II**

# **FILM 389**

**Special Topics in Film Studies** This course addresses a variety of topics in

Film Studies. See HIST 389, JOUR 389, MUS 389, SOCI 389, and SCTA 389 for specific course offerings (occasionally)

# **FILM 402**

**History in Film** 

The course explores the presentation and construction of history through film. Students will analyze how the interpretations and meanings of history shift over time and how films both shape and challenge the public's view of history. The course content varies according to historical period and instructor. The course may be taken twice, once with a US topic and once with a world topic. Offered periodically, about once a year.

### **FILM 442** 3 cr. World Cinema (g)

3 cr.

3 cr.

1 cr.

3 cr.

0.5-3 cr.

View the world through many nationsA? cultural and historical vantage points, and increase your facility with film language, artistic form and the worldA?s cultures for your studentA?s benefit and your own enjoyment. (F, or Sp, alternate years)

# **FILM 448** 3 cr. **Teaching Film in the Secondary School** This course focuses on the teaching of film in the Language Arts curriculum. Film language, artistic form, narrative structure, and communication structure will be used as a foundation for the analysis of films. The course will explore film theory, film genres, film types, social values and ethics, and the relationship between film and culture. The course will require students to create a curriculum project. Co-listed as FILM and SCTA 448/648. (SS)

### **FILM 489** 0.5-3 cr. **Special Topics in Film Studies**

This course address a variety of topics in Film Studies. See HIST 489 or ENGL 489 for specific course offerings. (ocassionally)

# **FILM 495 Independent Study**

The course allows an exploration of a particular area of Film Studies from examining film as an art form or industry, to the cultural popularity of this influential communication medium. Prerequisites: Student must be a Film Studies Minor and obtain the consent of the program coordinator for the Film Studies minor.

# **FILM 499 Directted Project in Film**

This course offers directed study of a film topic or directed production of a screenplay or a film as a culminating project for the minor, to be approved by the Film Studies Committee and supervised by a designated faculty member of the committee and (if necessary) by a selected faculty member in the field of study. A final research paper (15-20 pages) or a film script, or a film (15-20 minutes) will result from the student's directed study. Prerequisites: Junior or Senior Film Studies minor and consent of Film Studies Coordinator. (F, Sp)

# **FINANCE**

# **FINC 210 Personal Finance**

Topics covered include consumerism, identifying important life and financial goals, principles of personal money management and financial planning, use of credit, budgets, insurance, buying a home, creating an estate, and providing for retirement. This course may be used to meet the credit requirements in the business administration major or minor. (F, Sp).

# **FINC 279**

3 cr.

1 cr. **Cooperative Education and Internship I** Internships provide valuable experience in the business world significantly beyond classroom experience. Eligibility requirements include full-time business major in good academic standing; approval from internship advisor, department chair, and prior completion of 60 credits including basic business tool courses and business core courses. No more than three credits can be used as business electives. Pass/fail only.

### **FINC 289** 0.5-3 cr. **Special Topics in Finance**

# **FINC 314**

**Principles of Insurance** A survey of insurance and risk management concepts, the insurance industry and

3 cr.

common insurance contracts. Topics include: types of insurers, functions of insurers, legal principles of insurance, and an analysis of property, liability, life and health contracts. Special emphasis will be placed on personal insurance for the home, automobile, life and health. Prerequisites: ACCT 231.

### **FINC 335** 3 cr. **Introduction to Real Estate**

# **FINC 345 Managerial Finance**

This course reviews the acquisition, allocation, and management of resources within a firm. Topics include financial statement analysis, financial markets and institutions, investment securities, time value of money, cost of capital, capital budgeting, and financial forecasting. Prerequisites: Admission to College of Business and Economics. This includes students admitted to the University Fall 2003. Application for admission is done throught the Dean's Office, CBE.

# **FINC 347**

# **Financial Institutions**

This course explores the similarities and differences among financial institutions: banks, savings and loans, credit unions, finance companies, insurance companies, mutual funds, and pension funds. They are reviewed in terms of their utilization of financial markets, regulatory aspects, and financial performance. Prerequisite: FINC 345.

3 cr.

3 cr.

2-3 cr.

1-3 cr.

# FINC 348 Investments

Topic includes: review of types of investments; operation of security markets; valuation of common stock, bonds, and preferred stock; options, futures, and mutual funds. Prerequisite: FINC 345.

# FINC 350 Real Estate

Real estate is reviewed from primarily a residential property perspective. Topics considered include law of agency, real estate contracts, real estate finance, property appraisal, fair housing laws, professional ethics, and environmental issues. Real estate investment and property management will also be reviewed. Prerequisite: FINC 345

# FINC 355

# **Multinational Financial Management**

This course provides an in-depth review of financial management decisions faced by multinational firms in the international context. Prerequisites: FINC 345. (Sp).

# FINC 360

**Financial Derivatives** 

This course introduces both the theory and practice of the financial derivatives, as well as the use of theses derivatives in managing business and financial risks. Topics include: fundamentals of stock options, options strategies, option pricing, index options, futures markets, stock index futures, swaps, and warrents. Prerequisites: FINC 345 (F).

# FINC 378 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 CPA; junior or senior standing.

# **FINC 379**

# Internship in Finance

Internships provide valuable experience in the business world significantly beyond classroom experience. Eligibility requirements include full-time business major in good academic standing; approval from internship advisor, department chair, and prior completion of 60 credits including basic business tool courses and business core courses. No more than three credits can be used as business electives. Pass/fail only.

3 cr. FINC 446

3 cr.

3 cr.

3 cr.

6 cr.

2-6 cr.

0.5-3 cr.

# **Intermediate Managerial Finance**

This is a writing intensive course. An in-depth critical review of such finance topics as capital budgeting, capital structure theory, cost of capital, working capital management, mergers, and leasing. Additionally, theory will be applied with the case method. Prerequisites: FINC 345.

# FINC 448 Portfolio Management

This is a writing intensive course. The analysis of the most efficient ways to combine individual securities into a portfolio and practical aspects of portfolio management will be covered. Emphasis is on formulating investment objectives and evaluating portfolios terms of those objectives. Prerequisite: FINC 348.

FINC 489 Special Topics in Finance	0.5-3 cr.
FINC 490 Readings - Finance	1-3 cr.

FINC 499

# **Independent Study** Independent study is an opportunity for upper class students to select a project in an area of business and work independently with an assigned professor. Open only to business administration majors. Prerequisites: a 3.0 GPA in accounting and business courses, upper class standing and consent of department chair.

# FRENCH

FREN 100	2 cr.
French for Travelers	

# FREN 101 Beginning French I

An introduction to French through conversation, writing practice and cultural material. 101 presumes no previous study of the language. (F)

FREN 102	4 cr.
<b>Beginning French II</b>	

A continued introduction to French through conversation, writing practice and cultural material. Prerequisite: FREN 101 or testout.

### FREN 201 3 cr. Intermediate French I

Review of basics of French grammar; conversation, culture and reading. Prerequisite: FREN 102 or test-out. (F)

3 cr.

1-3 cr.

4 cr.

# REN 202

# Intermediate French II

Continuation of French grammar, conversation, culture and reading. Prerequisite: FREN 201 or test-out. (Sp)

FREN 2890.5-3 cr.Special Topics in French

# FREN 3013 cr.French Conversation and Composition IEmphasis is on developing proficiency in<br/>active skills, i.e., speaking and writing. This<br/>is a writing intensive course. Prerequisite:FREN 202 or test-out. (F)

FREN 3023 cr.French Conversation and Composition IIEmphasis is on developing proficiency in<br/>active skills, i.e., speaking and writing. This<br/>is a writing intensive course. Prerequisite:<br/>FREN 202 or test-out. (Sp)

# FREN 316

**History of French Cinema** The course charts the beginnings of French cinema at the turn of the century and provides an overview of key films and movements up to the present day. Prerequisites: French 301 or equivalent, or permission of the instructor.

# FREN 341

French Civilization

A language proficiency course that builds intercultural communication skills through the study of the history of France from its beginnings until 1800, including geography, art, and architecture. Particular focus on the Middle Ages and the French Revolution. The course is taught in French. Prerequisite: FREN 202 or consent of instructor. (F, alternate years)

# **FREN 342**

3 cr.

3 cr.

3 cr.

France and Francophone A language proficiency course that builds intercultural communication skills through the study of 19th and 20th century French and Francophone culture and civilization. Events covered are Napoleon and the rise of nationalism; the colonial period; World Wars I and II; post-war environment; decolonization; France and Francophone cultures today. The course is taught in French. Prerequisite: FREN 202 or consent of instructor. (Sp, alternate years)

# FREN 350

# **French Phonetics**

2 cr.

Techniques of perfecting and teaching the pronunciation of French. Prerequisite: FREN 201 or equivalent or consent of instructor. (Sp, alternate years)

# **FREN 351**

French Literature to 1800

A language proficiency course that builds intercultural communication skills through the study of the major works and trends of French literature from the Middle Ages to the eighteenth century. The course is taught in French. Prerequisite: FREN 202 or consent of instructor.(F, alternate years)

# **FREN 352** French Literature from 1800 to Present

A language proficiency course that builds intercultural communication skills through the study of the major works and trends of French literature from Romanticism to the present. The course is taught in French. Prerequisite: FREN 202 or consent of instructor. (Sp, alternate years)

# **FREN 378**

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)

# **FREN 389** 0.5-3 cr. **Special Topics in French**

# **FREN 401**

**Advanced French Communication** The capstone course of the language sequence. It is designed to refine a student's speaking ability with an emphasis on

grammatical accuracy and idiomatic authenticity. Prerequisite: FREN 302 or consent of instructor.(Sp, alternate years)

# **FREN 451**

**French Prose Fiction** 

The evolution and characteristics of French prose fiction from the eighteenth century to the present. Concentration is on representative works of major French authors. The course is taught in French. Prerequisite: FREN 302 or consent of instructor.(not offered on a yearly basis)

# **FREN 452 French Poetry**

The evolution and characteristics of French poetic forms from the Middle Ages to the present. Development of the technique of explication de texte, using representative poetry from Villon to the present is emphasized. The course is taught in French. Prerequisite: FREN 302 or consent of

instructor. (not offered on a yearly basis)

### **FREN 453** 3 cr. **French Drama**

The evolution and characteristics of French drama from the Middle Ages to the present. The course is taught in French. Prerequisite: FREN 302 or consent of instructor. (not offered on a yearly basis)

# **FREN 489** 0.5-3 cr. **Special Topics in French**

**FREN 490 Readings in French** 

An independent reading program in French. Prerequisites: FREN 302 and consent of instructor. (F. SP)

1-3 cr.

2 cr.

3 cr.

2 cr.

3 cr.

3 cr.

# **GENERAL ENGINEERING**

**GENG 120 Fundamentals of Drafting** 

# **GENG 121**

**Engineering Drawing** Principles of graphics communication are used in conjunction with Computer Aided Design (CAD) software to construct 2D and 3D models. Emphasis will be placed on the ability to visualize and construct accurate models of objects. Students will learn to create template drawings, principal views, auxiliary views and section views. Dimensioning and tolerance practices along with appropropriate views will be used to create plans and assembly drawings.(F)

# **GENG 201**

**Industrial Safety** Recognition of safety and health hazards in the workplace and their overall effects on society. Emphasis will be placed on the development of programs for hazard identification, correction, and/or prevention in connection with current federal (OSHA) and state (ILHR) regulations.(Sp, alternate years)

# **GENG 235** Surveying

Students will learn principles and theory of surveying, along with care and use of surveying equipment. Field procedures and computations for chaining, leveling, traversing, land description and mapping are included. (F)

**GENG 236 Advanced Surveying** 

This course covers precision surveying with advanced instruments for grades, vertical and horizontal curves, route surveys, topographic surveys, and geodetic principles. Legal principles including resurveys, boundary disputes, defective descriptions and riparian rights are

3 cr. presented. Prerequisite: GENG 235. (SP, alternate years)

### **GENG 245** 3 cr. **Materials Design Requirements** Selecting and specifying materials and components for mechanical systems:

includes design loading, expected life, reliability, cost, and the use of computers in the selection process. Prerequisite: PHYS 151 or 161. (Sp)

**GENG 251** 5 cr. Static Strength of Materials

# **GENG 252 Dynamics**

This course provides an understanding of the dynamics of particles and rigid bodies. The topics included are kinematics, kinetics, work and energy methods, impulse and momentum methods in two and three dimensions including rotation. Prerequisites: PHYS 152 or 162 and PHYS 361 or MATH 266. Co-listed as GENG 252. (SP)

### **GENG 255** 2 cr. **Architectural Drafting**

**GENG 265 Engineering Graphics**  3 cr.

3 cr.

3 cr.

# Computer Aided Design (CAD) software will be used to construct 3D models. Emphasis will be placed on the ability to construct accurate models of objects. Students will learn to create 3D models of simple and complex mechanical systems, and irregular surfaces. Advanced features of CAD will include parametric modeling, solid modeling, and enhanced presentation of models including rendering. Prerequisite: GENG 121 or consent of instructor. (Sp)

### **GENG 271** 4 cr. **International Internship**

**GENG 289** 0.5-3 cr. **Special Topics in General Engineering** 

# **GENG 368 CAD** Applications

Software packages designed for use in a Computer Aided Design (CAD) environment will be used to construct and anlyze 3D models. Various software packages will be used to construct complex mechanical systems, residential buildings, irrigation system design, and landscape design. Additionally, the software will be used to perform engineering applications including stress analysis and list of materials. Rendering and animation will be used to enhance presentation of models. Prerequisite: GENG 121 or 265 or equivalent. (Sp)

3 cr.

3-6 cr.

3 cr.

3 cr.

#### **GENG 389** 0.5-3 cr. **Special Topics in General Engineering**

#### **GENG 450 Engineering Project Management**

A study of engineering and management functions in product and/or project development. An overview of technology through a functional review of: research and development, design, production and technical service. (Sp, alternate years)

**GENG 489** 0.5-3 cr. **Special Topics in General Engineering** 

#### **GEOGRAPHY**

#### **GEOG 110** 3 cr. **Physical Environment: Patterns and** Systems

This course presents a basic understanding of the processes which in combination produce worldwide patterns of the natural environment: landforms, climate, vegetation and soils.(F, Sp)

#### **GEOG 111**

#### Laboratory for Physical Environments: Patterns and Systems

This course is designed to provide students with a hands-on experience using lab and field instruments and techniques about which they are learning in Geography 110. This lab is a requirement of geography majors and minors, optional for other students. The lab need not be taken concurrently with the Geography 110 lecture course. Prerequisite or co-requisite: GEOG 110.(Sp)

#### **GEOG 120** Human Geography

This course introduces the student to the description and analysis of world patterns of population, race, religion, language, agriculture, industry, levels of economic development, urbanization, and human environmental impact. (F, Sp)

#### **GEOG 212**

#### Weather and Climate

Students will study the elements of weather and climate, climate classification, distribution, climate change and its impact on people. (alternate years)

#### **GEOG 213**

#### Landforms of North America

This course is designed as a regional analysis of the major physical landscape regions of the United States and Canada through a study of the fundamental processes that produce them. (alternate years)

## **GEOG 214**

3 cr.

1 cr.

3 cr.

3 cr.

3 cr.

World Patterns of Plants and Animals A global investigation of the distribution and geographic characteristics of plants and animals, and the factors influencing these distributions including human intervention, migration, and diffusion.(alternate years)

#### **GEOG 220** 3 cr. **Economic Geography**

A survey of geographic patterns of resources, production, consumption and distribution. Emphasis will be on the development of the world economy. The environmental and social impacts of globalization on the world economy upon advanced and developing regions will be examined. A key theme will focus on the global economy of local places.(alternate years)

#### **GEOG 237**

Poverty in the United States (d) The course describes the distributions of selected economically disadvantaged populations and regions, and analyzes location factors contributing to those distributions. Topics include urban and rural African Americans, Hispanics, Native Americans, Appalachia, Southeast Asians, women and children in poverty, and the elderly poor. (alternate years)

#### **GEOG 240** The United States

Contemporary patterns of the physical environment, population, settlement patterns, agriculture, resources, industry and, politics and culture issues will be examined. Emphasis is on regional differences and interrelationships.(F)

#### **GEOG 241** Wisconsin

This course provides a description and analysis of Wisconsin's physical environment: climate, landforms, vegetation; and human geography: history of settlement, population characteristics, agriculture, industrialization, and urbanization. (Sp, alternate years)

#### **GEOG 242** Canada

This course describes contemporary patterns of population, environmental resources, agriculture, industry and settlement in Canada. Native cultures and northern lands will be highlighted.(alternate years)

### **GEOG 250**

Introduction to Cartography and **Geographic Information Systems**  This course introduces fundamentals of mapping and GIS. The map-making process, collecting and processing cartographic data, map symbolization, map design, and map production are covered in a GIS context. The map as mode of communication is emphasized. Raster and vector GIS data formats are introduced. This course is the prerequisite for all cartography and GIS courses. Special course fee required. (F, Sp)

#### **GEOG 255 Thematic Map Design**

3 cr.

This course deals with the following topics: analyzing and processing data for thematic maps; the creation of graduated symbol, dot, isoline, choropleth, dasymetric, and multivariate data maps; and cartographic problems posing special challenges when employing these mapping strategies. Special course fee required. Prerequisite: GEOG 250.(Sp)

#### **GEOG 279**

1 cr. **Cooperative Education and Internship I** This internship allows the student to gain credits through field/work experiences. The work experience must be at a professional level with an appropriate business, agency or organization with a geographic, GIS, or mapping focus. This course requires student to develop a resume and explore career opportunities. Prerequisites: Geography MajorsGEOG 110, 120 and permission of the department chair; Cartography MinorsGEOG 250 and 255 or 360 and permission of the department chair. (F, Sp, SS)

#### **GEOG 289** 0.5-3 cr. **Special Topics in Geography**

**GEOG 300** 

3 cr.

### **Environmental Education**

This course is designed to meet the certification requirement for teacher education candidates as specified by the state of Wisconsin Department of Public Instruction Environmental Education rule. The course will investigate the following environmental issues: the ecosystem, population, food production, energy, natural resource depletion, land use and misuse, and sources of environmental impact. Teaching methodologies will be presented to incorporate environmental content into the curriculum. Field trips required. Colisted as GEOG 300/500. Special course fee required. Prerequisites: Junior standing required and TED 211 or 212 or consent of instructor. (F, Sp, SS)

3 cr.

#### The Physical Environment of Urban Areas

This course provides a discussion of how people have changed the natural environment by urbanization with a focus on climate, atmospheric composition, water movement and vegetation. The constraints imposed upon urban land use by the physical environment will also be discussed. Prerequisite: GEOG 110 or GEOL 101 or consent of instructor.(yearly)

#### **GEOG 322 Urban Geography**

The course describes and analyzes the distribution of cities and their interaction, the spatial patterns of residential and nonresidential land uses, and the characteristics of urban populations. Field study project in the Twin Cities is required. Prerequisite: GEOG 120 or consent of instructor.(not offered on a yearly basis)

#### **GEOG 324** 3 cr. Historical Geography of the United States

The settlement and territorial expansion of the United States from colonial times through 1945 is covered. The development of regional economies, rivalries, cultures, creation of a continental country, and growing involvement in global affairs are examined. The contributions of native peoples, minorities, and women in continental settlement will be studied. Prerequisite: GEOG 240 or consent of instructor. (alternate years)

#### **GEOG 340** Europe

The course examines the various environmental, political and cultural elements which give the major European states their unique regional character, and also looks at the ongoing process of European integration. Prerequisite: GEOG 110 or 120 or consent of instructor.(alternate years)

# **GEOG 342**

Latin America

This course provides a regional survey of physical, cultural, political and economic patterns of Middle and South America. Topics include distribution of population, landforms and climates, impacts of colonization, cultural and agricultural systems, urban and economic development and current ecological issues. Prerequisite: GEOG 110 or 120 or consent of instructor.(alternate years)

#### **GEOG 343** Africa

The course provides a regional survey of physical environments, human settlements, and cultures of the African continent. Topics include landforms and climates, population, cultural and agricultural systems, urban and economic development and current ecological issues. The impacts of the European colonial experience on the continent are explored. Prerequisite: GEOG 110 or 120 or consent of instructor.(alternate years)

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

## **GEOG 344**

### Asia and Oceana (g)

A regional survey of the physical, cultural, political and economic patterns of East and South Asia and Oceania is presented with special attention to variations in population characteristics and levels of economic development. Prerequisite: GEOG 110 or 120 or consent of instructor.(not offered on a yearly basis)

#### **GEOG 350 Map Design and Production**

#### **GEOG 360 Geographic Information Systems: Theory and Methods**

This course emphsizes the theory and methods for creating and utilizing geographic information systems (GIS). Applications of GIS, digital database design and construction, geographic analyses and presentation of results of analyses in map form will be covered. Students will gain experience with both vector and raster systems, using ArcGIS, ARC/Info and Idrisi. Special course fee required. Prerequisite: GEOG 250.(F, Sp)

#### **GEOG 365** Quant Tech in Geography and Cartography

An introduction to statistical measures and models commonly used to describe spatial variation in one or more phenomena. Topics include descriptive statistics, probability distributions, sampling, correlation and regression. In addition, measures of spatial correspondence and distributions, graph design, and mapping the results of statistical analyses are examined. Prerequisites: GEOG 110 or 120 or consent of instructor.(Sp)

## **GEOG 368 Geoprocessing Techniques**

This course covers topics on the integration, transformation, and processing of digital data common to Cartography, GIS, and Remote Sensing. Topics include data base design, sources of digital data,

data structure and format transformations, line generalization, global positioning systems (GPS) and digital image processing of satellite imagery using ArcGIS, ArcInfo and Idrisi. Special course fee required. Prerequisite: GEOG 360.(F)

#### **GEOG 376** 3 cr. **Experience Greece: Culture Past and** Present

#### **GEOG 378** 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)

#### **GEOG 379** 3-12 cr. **Geography Internship**

The internship allows geography students to earn credits through practical field experiences. Experiences must be at a professional level with an appropriate organization, businesses or government agency with a geographic, GIS, or mapping focus. Prerequisites: minimum of 9 cr. in Geography at or above the 200 level; permission of department chair.(F,Sp,SS)

## **GEOG 385**

3 cr. Seminar: the American Frontier Focusing on major themes and images in the perception of the American Frontier experience, the course is a joint participation seminar with Geography and English. Sources from history, literature and geography are used. Co-listed as ENGL/GEOG 385. (Sp, alternate years)

#### **GEOG 389** 1-3 cr. **Special Topics in Geography**

Selected topics of particular interest to students and in areas of special staff expertise wil be studied.

#### **GEOG 401** 2 cr.

Senior Colloquium in Geography This is a writing intensive course. A survey of the discipline of geography, including the development of the discipline, geographic source materials and methodologies, field methods and experience, and the subfields of the discipline. Students will identify and carry out research on a field of their choice under the supervision of an appropriate faculty member. Written and oral presentation of research results. Prerequisite: geography major with junior or senior standing.(Sp)

#### **GEOG 412**

#### Advanced Climatology

This course focuses on advanced topics in weather and climate, including measurement and estimation techniques, synoptic climatology, energy budget studies, forest climatology, and tree ringclimate relationships. Students will develop projects requiring data collection and field study. Prerequisite: GEOG 212 or GEOL 330. (not offered on a yearly basis)

### **GEOG 428**

**Political Geography** This course emphasizes the technical and

philosophical aspects of American political landscapes. Voting patterns; territorial political entities: local, state, national, imperial; role of the lands and seas; geopolitics; and the role of the environment and natural resources on international relations; and impacts of political entities on the landscape are explored. Prerequisite: GEOG 120 and one 200 or 300 level human geography course, or permission of the instructor. (Sp alternate years)

#### **GEOG 450**

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

**Advanced Map Design and Prod** Advanced mapping strategies are studied including cartograms, 3-D mapping, animated, and interactive maps. Advanced map design, distribution, and production are explored using image processing, GIS, internet, and graphic production software. Special course fee required. Prerequisites: GEOG 250 and 255.(Sp)

#### **GEOG 455**

Animated and Interactive Cartography Rapid advancements in computer technology and the Internet have recently changed the world of mapping. While maps were once static, paper images, now, they can be animated, interactive, and user-controlled. This course examines theory, methods, and techniques related to map animation, interactive mapping, and Internet mapping. Focus is placed on both theoretical and practical aspects of designing effective digital maps for change analysis, exploratory data analysis, and Internet distributions. Prerequisites: Junior or higher and GEOG 250, and GEOG 255 or GEOG 360. (F, offered alternate years)

#### **GEOG 460** Advanced GIS

Advanced concepts and techniques of geographic modeling and analysis are covered. Exercises provide hands-on experience performing geographic analyses in contexts applicable to both the physical and social sciences. Complex overlay, neighborhood, surface, and interpolation

functions are examined in detail using ArcGIS, ArcInfo, and Idrisi. A semester GIS project and special course fee are required. Prerequisite: GEOG 360. (Sp)

#### **GEOG 489** 0.5-3 cr. **Special Topics in Geography**

**GEOG 490** 

#### **Readings in Geography** This course is designed for students who

desire advanced reading and discussion on a topic developed in consultation with an instructor. Prerequisites: consent of department chair and instructor.

#### **GEOG 499 Independent Study**

This course is designed for advanced geography students who wish to work independently on a project. A paper describing the research or a finished cartographic product is required. Prerequisites: consent of department chair and instructor.

#### **GEOLOGY**

#### **GEOL 101 Introduction to Geology**

The investigation of the planet Earth. Includes the study of earth materials, the dynamic processes which have shaped and are shaping the earth's surface and interior through time, and the influence of these materials and processes on humanity.(F, Sp)

#### **GEOL 102**

Introduction to Geology Laboratory Laboratory study of minerals, rocks and earth processes including interpretation of topographic and geologic maps. Using geological data to understand the scientific method. Field trips and lab fee required. Pre- or Co-requisite: GEOL 101. (F, Sp)

#### **GEOL 150 Historical Geology**

The evolution of Earth and its life through geologic time as revealed by the study of rocks and the fossils within them. Laboratory and field work with fossils, maps and sedimentary rocks. Field trip required. Prerequisites: GEOL 101 and 102.(Sp)

#### **GEOL 202** Oceanography

Introduction to the physical, geological, chemical and biological makeup of the world's oceans. Future potential of the ocean as a source of energy, minerals and food.(Sp)

#### **GEOL 230** Mineralogy

Techniques for the description and identification of minerals. Basic crystallography and crystal chemistry stressing the application of these disciplines to minerals and ore deposits. Includes extensive laboratory component. Prerequisites: GEOL 102, CHEM 121 or consent of instructor.(F)

### **GEOL 231** Petrology

Genesis, classification and hand specimen identification of common igneous and metamorphic rocks. Introduction to the examination of rocks in the field and in thin sections. Weekend field trip and lab fee required. Includes extensive lab component. Prerequisite: GEOL 230. (Sp)

### **GEOL 269**

#### **Environmental Geology**

This is a writing intensive course. A survey course designed to develop a general understanding of the relationship of the various earth systems to human activity, to deal rigorously and optimistically with both short-term, local geologic problems as well as those of world impact. Prerequisite: GEOL 101. (F)

#### **GEOL 270** Internship I

An additional off-campus occupational work experience for the student. Involves full-time employment with a cooperating agency or firm. Prerequisites: 30 cr. and consent of director and faculty coordinator.(F, Sp,SS)

#### **GEOL 271**

#### **International Internship**

An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Special course fees required. Prerequisites: 30 semester credits.(F, SP, SS)

#### **GEOL 285**

## Sophomore Seminar in Geology

A class directed at learning the techniques of library research and writing in the geological sciences. Students will write a class paper on a topic relevant to a current geological topic. Prerequisite: GEOL 101 or consent of instructor. (Sp)

### **GEOL 289**

**Special Topics in Geology** 

#### **GEOL 305 Geology of the Planets**

2 cr.

0.5-3 cr.

Imagery of the planets and satellites of the solar system will be examined in order to identify geologic features and the processes

4 cr.

3 cr.

2-4 cr.

4 cr.

1 cr.

1 cr.

4 cr.

3 cr.

1-3 cr.

1-2 cr.

responsible for their formation. Special emphasis is given to tectonic, impact, volcanic, and geomorphological features and theories concerning internal structure of the bodies. Prerequisite: GEOL 101 or PHYS 117, or equivalent course required. (F)

#### GEOL 326 Structural Geology

Genesis, classification and interpretation of geologic structures. Physics of rock deformation and elementary stress analysis. Examination of the structural characteristics of orogenic belts. Graphical solution of structure problems and maps. Field trip required. Prerequisites: GEOL 102, 150; MATH 147; PHYS 151; or consent of instructor. (F)

#### **GEOL 327**

Geomorphology and Glacial Geology This is a writing intensive course. This course covers the principles and analyses of processes that affect changes of the Earth's surface and govern the development of landforms. Topics include lecture and laboratory experiences in weathering and soil development, slope stability, stream hydraulics, wind action, groundwater and karst development, periglacial process, glacier erosion and transport, glacial sediments, and glacial landforms. Field trip required. Prerequisites: GEOL 102 and MATH 146. (Sp)

#### GEOL 330 Meteorology

This course provides an introduction to the theory and application of atmospheric sciences. Physical processes of the atmosphere will be emphasized including: nature and composition of atmosphere, solar radiation and earth's heat balance, humidity, condensation, precipitation, clouds, air pressure, winds, global circulation, weather fronts, thunderstorms, tornadoes, hurricanes, weather forecasting and weather maps, and meteorological optics. (F)

#### GEOL 362 4 cr. Stratigraphy and Sedimentation

A study of sedimentary rocks, processes, and stratigraphic relationships. The course progresses through a study of sediment transport processes, sedimentary rocks in outcrops, hand samples, and thin sections, field geologic methods for sedimentary rocks, review of modern and ancient depositional environments of sedimentary rocks, and a study of stratigraphic principles, including correlation techniques. Laboratory exercises, sample and thin section identification and analysis, field projects. Field trip(s) required. Prerequisites: GEOL 150, 231, and MATH 147.(F)

#### GEOL 370 Internship II

4 cr.

4 cr.

2 cr.

An additional off-campus occupational work experience for the student. Involves full-time employment with a cooperating agency or firm. Prerequisites: Ag. 270 and consent of director and faculty coordinator.(F,Sp,SS)

#### GEOL 371 Regional Field Trip

This is a writing intensive course. Geology field trip to acquaint students with structure, stratigraphy, petrology, geomorphology, paleontology, and geologic history of the western United States, New Zealand, Australia or Europe. Project and travel fees required. Prerequisites: GEOL 102 and consent of the instructor.(Sp)

#### GEOL 372

**Southwest Regional Field Trip** This is a writing intensive course. A geological field trip to acquaint students with the tectonics, petrology, stratigraphy, geomorphology, paleontology and geologic history of the southwestern United States. Project and travel fees required. Prerequisites: GEOL 102 and consent of instructor. (Sp)

#### GEOL 373 1 cr. Northwest Regional Field Trip

This is a writing intensive course. A geological field trip to parts of Wyoming, Utah, Idaho and Montana. Students will visit localities at which geological features such as volcanoes, folds, faults, dinosaur fossils, intrusions, geysers and hot springs can be studied. Project and travel fees required. Prerequisites: GEOL 102 and consent of instructor.(Sp)

#### **GEOL 374**

Lake Superior Regional Field Trip This is a writing intensive course. A field trip showing the geology of a typical continental shield, as exposed around Lake Superior. Project and travel fees required. Prerequisites: GEOL 102 and consent of the instructor.(Sp)

#### GEOL 375 AP Regional Field Trip

This is a writing intensive course. This is a field geological field trip to acquaint students with the structure, petrology, ore deposits, paleontology, geomorphology and regional geology of the central Appalachian Mountains. Project and travel fees required. Prerequisites: GEOL 102 and consent of instructor. (Sp)

#### **GEOL 376**

2-4 cr.

1 cr.

1-2 cr.

1 cr.

1 cr.

#### Southeast Regional Field Trip

This is a writing intensive course. A geological field trip to develop students' appreciation of the geology of the southeastern United States and to acquaint them with geomorphology, stratigraphy, structure, paleontology and mineral resources of that region. Project and travel fees required. Prerequisites: GEOL 102 and consent of instructor.(Sp)

#### GEOL 377 1 cr. Northeastern Regional Geology Field Trip

This is a writing intensive course. This field trip exposes students to the geology of portions of Maine, New Brunswick and southern Quebec, especially the Gaspe Peninsula. Themes of this course include: geologic/tectonic processes and structures involved in continent building of the northern Appalachian Region, continental margin and marine sedimentology, and surficial/coastal geology. This trip also includes a distinct cultural educational experience by visiting French-speaking Quebec, including a stay in historical old Quebec City. Prerequisites: GEOL 102 and consent of instructor.

#### GEOL 378 Semester Abroad

#### 3-6 cr.

2 cr.

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)

#### GEOL 379 3 cr. Geology and Public Gardens of Southern England

A study trip visiting classic geology and public gardens in Southern England. Study the geological history and development of Southern England, including coastal erosion and deposition that are currently modifying the area. Evolving garden design and botanical diversity will be studied during visits to historic and modern English gardens. Prerequisites: GEOL 101 or HORT 169 or equivalent and/or permission of instructor.

GEOL 389	0.5-3 cr.
Special Topics in Geology	

#### GEOL 417 Hazardous Waste Operation and Emergency Response

The course will provide an overview of the pertinent environmental regulations; major emphasis will focus on the scientific basis for toxicology and chemistry of hazardous materials. Laboratory experiences will emphasize utilization of environmental monitoring equipment. Safe work practices including use of proper personal protective equipment will be stressed. This course meets OSHA certification. Prerequisites: CHEM 251/256, BIOL 230, or consent of the instructor. Lab fee required.(Sp)

#### **GEOL 441**

#### **Introduction to Geophysics**

The elementary study of gravitational, magnetic, seismic, electrical and thermal properties of the Earth will be examined. Applications to the determination of earth structure and global tectonics from the measurement and interpretation of these properties. Exploration techniques and applications to the petroleum and hydrogeologic industries are also introduced. Weekend field exercises required. Prerequisites: GEOL 102, PHYS 151, 152, MATH 166 or consent of instructor.(Sp)

#### **GEOL 445** Hydrogeology

An introduction to the occurrence, movement, analysis, and use of groundwater. The course includes an overview of the properties of porous media, the physical occurrence of subsurface water, groundwater flow mechanics, regional flow systems, well hydraulics and design, aquifer geology, groundwater resources, groundwater contamination and transport, remediation techniques, and an introduction to groundwater modeling. Laboratory activities, research projects, and field activities. Field trip required. Prerequisites: ESM 360, GEOL 102, (MATH 166 is recommended).(Sp)

#### **GEOL 446 Soil and Water Remediation**

## **GEOL 450**

Paleontology This is a writing intensive course. An introduction to the principles of paleontology as well as the taxonomy, morphology and biostratigraphy of major invertebrate and vertebrate fossil groups. Special topics in evolution will be discussed. Laboratory and field trip

required. Prerequisite: GEOL 150.(F)

#### **GEOL 485**

#### **Senior Research Experience**

This is a writing intensive course. Original research experience under faculty supervision, resulting in a written paper and oral presentation to a peer group. Prerequisites: senior standing and consent of instructor. (F)

GEOL 489	0.5-3 cr.
Special Topics in Geology	

ents will examine independent field problems and perform laboratory work or library research. Prerequisites: junior or senior standing and consent of instructor. (F,Sp)

### **GERMAN**

4 cr.

3 cr.

2 cr.

4 cr.

1 cr.

GERM 100	
German for Travelers	

#### **GERM 101**

**Beginning German I** 

An introduction to German through conversation, writing practice and cultural material. 101 presumes no previous study of the language.(F)

#### **GERM 102** 4 cr. **Beginning German II**

A continued introduction to German through conversation, writing practice and cultural material. Prerequisite: GERM 101 or test-out.(Sp)

#### **GERM 201**

Intermediate German I Review of basics of German grammar; conversation, culture and reading. Prerequisites: GERM 102 or test-out.(F)

#### **GERM 202**

**Intermediate German II** Continuation of German grammar, conversation, culture and reading. Prerequisite: GERM 201 or test-out.(Sp)

#### **GERM 275 Business German**

This course is designed to introduce business and economics students to business terminology and concepts which they would encounter in German-speaking countries or in German/Swiss/Austrian companies doing business in the U.S. or elsewhere. Prerequisite: GERM 201 or equivalent. (Sp, alternate years)

#### **GERM 289** 0.5-3 cr. **Special Topics in German**

#### **GERM 301** 3 cr. German Conversation and Composition I

Emphasis is on developing proficiency in the productive skills of writing and speaking. This is a writing intensive course. Prerequisite: GERM 202 or test-out.(F)

#### **GERM 302**

#### German Conversation and Composition Π

Emphasis is on developing proficiency in the productive skills of writing and speaking. This is a writing intensive course. Prerequisite: GERM 202 or test-out. (Sp)

#### **GERM 315** 3 cr.

**Classic and Modern German Film** 

German classic and new wave film is examined for cultural, artistic and linguistic merit. Films based on literary masterpieces of writers such as Schiller and T. Mann are studied as well as films created in the last 25 years by new wave directors Herzog, Wenders and Schlondorff. Prerequisite: German 202. Co-listed as FILM 315.(not offered on a regular basis)

#### **GERM 341**

3 cr.

3 cr.

German Civilization to 1648 A language proficiency course that builds intercultural communication skills through the study of the history and culture of the Germanic peoples from 45 B.C. to 1648, including geography, architecture, art, and Roman, and Viking influences. Particular focus is on the Lutheran Reformation. The course is taught in German. Prerequisite: GERM 202 or consent of instructor.(F, alternate years)

#### **GERM 342**

3 cr.

**Modern German-Speaking Cultures** A language proficiency course that builds intercultural communication skills through the study of 20th century German-speaking countries. Events covered are World Wars I and II; post-war reconstruction; division and unification; social and political situation today. The course is taught in German. Prerequisite: GERM 202 or consent of instructor.(Sp, alternate years)

#### **GERM 350**

### **German Phonetics**

Techniques of perfecting and teaching the pronunciation of German. Prerequisite: GERM 201 or consent of instructor.(Sp, alternate years)

#### **GERM 351**

3 cr.

2 cr.

#### **Survey of German Literature**

A language proficiency course that builds intercultural communication skills through the study, in German, of the major works and trends of German literature of the Middle Ages, Renaissance, Baroque, Enlightenment, Storm and Stress and Classicism. Prerequisite: GERM 202 or consent of instructor.(F, alternate years)

### **GERM 352**

#### **Survey of German Literature** A language proficiency course that builds

3 cr.

3 cr.

3 cr.

2 cr.

4 cr.

intercultural communication skills through the study, in German, of the major works and trends of Romanticism, Biedermeier, Young Germany, Realism, Naturalism, Expressionism and the modern period. Prerequisite: GERM 202 or consent of instructor.(Sp, alternate years)

## GERM 378

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)

#### **GERM 389**

**Special Topics in German** 

#### **GERM 401**

Advanced German Communication The capstone course of the language

sequence. It is designed to refine a student's speaking ability with an emphasis on grammatical accuracy and idiomatic authenticity. Prerequisite: GERM 301 or consent of instructor. (Sp, alternate years)

#### **GERM 451**

German Drama and Theatre

The development of German drama from Lessing to the present . Critical reading and analysis of German dramatic masterpieces include the works of Lessing, Goethe, Schiller, Kleist, Grillparzer, Buchner, Brecht and Durrenmatt. This course is taught in German. Prerequisite: GERM 302 or consent of instructor.(not offered on a yearly basis)

#### **GERM 452**

German Tale, Short Story and Novella The development of German narrative fiction from 1700 to the present. Critical reading and analysis of tales, stories and novellas by eighteenth, nineteenth and twentieth century authors are included. This course is taught in German. Prerequisite: GERM 302 or consent of instructor.(not offered on a yearly basis)

#### GERM 453 German Poetry

Selections from the genre of German poetry from the Middle Ages to the present. Critical reading and analysis of major poets such as Goethe, Schiller, Heine and Rilke are included. This course is taught in German. Prerequisite: GERM 302 or consent of instructor.(not offered on a yearly basis)

GERM 489	0.5-3 cr.
Special Topics in German	

### GERM 490

**Readings in German** An independent reading program in German. Prerequisites: GERM 302 and consent of instructor.(F, Sp)

1-3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

### HEALTH

3-6 cr.

0.5-3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

HEAL 138	0.5-0.5 cr.
Aerobics	

#### HEAL 262

**Human Anatomy and Physiology** The study of the structure and function of the human body as it applies to health, athletics and human movement. Emphasis is placed on the study of various anatomical models. Prerequisite: BIOL 100 (Sp)

#### HEAL 263 Human Anatomy

The study of the structure of the human body as it applies to health and physical education. Emphasis is placed on the study of the various anatomical models. Prerequisite: BIOL 100 (F, Sp)

#### HEAL 269 Wellness

Analysis of the consequences of personal decisions and personal lifestyle choices related to personal health and well-being. The study of techniques employed in the promotion of health information, services and products. This course is focused on the needs of pre-professional elementary and secondary education students.(Sp)

### HEAL 289 0.5-3 cr. Special Topics in Health

HEAL 315 Nutrition

The purpose of this course is to provide future elementary/secondary educators and coaches with the basics about nutrition, as well as information on how to evaluate nutrition research issues and controversies and how to apply what they learn about nutrition in daily life. (F, Sp)

### HEAL 341 3 cr. Health Promotion at the Worksite

#### HEAL 350 Community Health

Community-based health promotion and disease prevention are the focal points of this course. This course will emphasize using educational approaches to build the capacity of communities to create the conditions in which people can become empowered to improve their health and the health of their communities. Emphasis will be given to forging partnerships necessary to address community health problems. (15 hours Community Based Service Learning required) Prerequisite: HEAL 269. (SS)

#### HEAL 360 3 cr. Methods and Materials in Health Education

#### HEAL 361 3 cr. Methods and Materials in Health for the Elementary Teacher

A study of the content of the elementary and middle/secondary school curriculum in health with emphasis on unique teaching techniques. Emphasis will also be placed on emergency medical procedures unique to elementary school children. (F,Sp)

### HEAL 364 2 cr. Advanced Human Anatomy Lab

HEAL 366 Exercise Physiology 3 cr.

The purpose of this course is to provide future physical and health educators with the knowledge of how the body's structures and functions respond to acute and chronic bouts of exercise. Emphasis is placed on the relationship between regular physical activity and general health. Prerequisites: HEAL 263. (F)

HEAL 378	6 cr.
Semester Abroad	

HEAL 389 0.5-3 cr. Special Topics in Health

This course provides an opportunity for in-depth study of contemporary issues, programs or practices in health education. Depending upon the specific topic of study, the content of the course may focus on research findings, theoretical advances or practical applications of research and theory as they affect health education in schools. Because of its focus on contemporary issues the course is appropriate for teacher education students in training and experienced teachers who desire in-depth training in a specific area. (Not offered on a yearly basis)

#### HEAL 460 3 cr. Teaching of Family Life and Sexuality Education

Designed to provide an understanding of the content and methodology of teaching sexuality education and family life education in the school setting. Personal value development regarding topics related to sexuality (e.g. gender roles, sexual orientation, healthy relationships, conflict resolution) will be explored. A framework for planning a comprehensive family life program for K-12 will be discussed as well as available materials, DPI recommendations and community attitudes and controls.(F)

#### **HEAL 465** 3 cr. **Comprehensive School Health Education** Programs

This course will focus on planning, promoting, and implementing a comprehensive school health education program at the elementary, middle and secondary levels. Learning experiences will include needs assessment; program evaluation; curriculum development and coordination; public relations; and the development of cooperative relationships with parents, private business, and voluntary and community health agencies. Prerequisites: HEAL 269 (Sp)

#### **HEAL 470** 1-4 cr. **Health Education Practicum**

A semester of field experiences in health education or a health-related industry under the guidance of an experienced health educator. Fifty hours of field experience are required for each credit taken. Prerequisites: health education minor or major in Health and Human Performance Option III with junior/senior standing and consent of instructor. (F, Sp)

#### **HEAL 489 Special Topics in Health**

#### **HEAL 490**

#### **Readings in Health Education**

Designed as a supplement to students' required course work. This course allows students the opportunity for an in-depth study of issues and/or problems in health education. Prerequisite: consent of instructor.

#### HISTORY

#### **HIST 100 Defining Themes in US History**

The course provides a general overview of U.S. history through a series of problems or themes such as development of democracy, ethnicity, industrialization, class, urbanization, and issues involving race, and gender. The course provides students with an understanding of the basic ideas, concepts, and chronology of U.S. history as well as an introduction to historical methodology. (F, Sp)

#### **HIST 101 Origins of Civilization**

A foundation course introducing the student to the basic outlines of world history to 1500. The main subjects covered will be

the transition from hunting and gathering to agriculture and husbandry, the origin and development of urban life, warfare and the monarchy; the political organization of human societies in the form of cities, states and empires; the philosophical and cultural underpinnings of those societies; the formation and the expansion of communities of belief based on religious teachings; and finally the increasing global interaction of peoples and cultures. (F, Sp)

#### **HIST 102 Origins of One World**

The beginning of our one world is traced to the European discovery of America, Africa and Asia by 1500. The monarchies of Western Europe and Tsardom of Russia and the industrial revolution permitted a domination of lesser states and an economic and political penetration of great empires. Beginning also in Europe the tide of revolutions against monarchs became world wide revolutions against imperialism. The European economy and wars also became global. In most of the world communist and fascist dictators became dominant in the 20th century, climaxing in two World Wars and finally the Cold War, seemingly won by democratic capitalism.(F, Sp)

## **HIST 103**

0.5-3 cr.

1-3 cr.

3 cr.

3 cr.

#### United States History to 1877

The origins of civilization on the North American continent, the evolution of the American political, social and economic structure including the American Revolution, the Civil War and the period of Reconstruction.(F, Sp)

#### **HIST 104 United States History Since 1865**

This course provides an introductory history of the United States covering the period between the Civil War and Reconstruction to the 1990s. The emphasis will be on major political, economic and social developments. (F,Sp)

#### **HIST 105**

#### The U.S. and the World in the Twentieth Century

The general education course for nonmajors introduces students to the historical origins of contemporary global issues, emphasizing the United States' role in the development of the twentieth century, sometimes referred to as "the American Century." Moving chronologically from the Spanish-American-Cuban-Filipino War to the present, the course examines key watersheds in U.S. foreign relations and their impacts at home and abroad. (F,Sp)

#### **HIST 130 Russian Civilization**

#### **HIST 201**

Introduction to Asian Civilization (g) A study of the civilizations of India, China, Japan and their borderlands, the religions, philosophies, literatures, the economic and political patterns of this increasingly important area of the world, including comparisons with Western Civilization.(F, Sp)

#### **HIST 202 Introduction to Latin American** Civilations (g)

A survey of the major historical forces contributing to the development of modern Latin America with an emphasis upon the blending of Native American, European and African cultures. (F)

#### **HIST 203**

3 cr.

The Mediterranean: A Survey (g) This course is a survey of the history of the interdependence of cultures, religions, polities, ecologies and economies in the Mediterranean region from late prehistory to the present. Offered every fall semester or on demand.

#### **HIST 204**

3 cr.

3 cr.

3 cr.

#### 3 cr. **United States Immigration and Ethnic** History

The course examines patterns of immigration to the United States from the seventeenth century to the present. Emphasizing historical shifts in migration, the course analyzes economic, cultural and political ideologies and forces shaping migration patterns; histories of diverse immigrant groups; social and cultural constructions of racial and ethnic categories, especially in the context of nationalism and citizenship; and the effects of migration on ethnic communities, on interethnic relationships and on nationhood in the United States.(F, alternate years)

#### **HIST 205**

(d)

#### Women's History: United States

This course will offer a multicultural approach to the history of women in the United States. Beginning with the period of contact between Native Americans and Europeans, the course emphasizes the ways that historical developments and social institutions have affected women differently depending on race, class, and ethnicity. Co-listed as WMST 205. (F, alternate years)

#### **HIST 206** Native Americans and the United States

A survey course of the Native American experience from pre-history to the

3 cr.

3 cr.

3 cr.

3 cr.

present. Attention will be paid to the interaction between Native American and Euro-American cultures in the colonial experience and in the American West, and the issues raised by the question of sovereignty. (F, Sp)

#### **HIST 207**

### African American History (d)

This course examines the economic, political, social and cultural conditions of African Americans in the North and South from arrival to the present, as well as relationships between blacks and whites throughout this history. Emphasis will be placed on examining systems of oppression, strategies of resistance and cultural survival within black communities and contribution of African Americans to the larger arena of U.S. history.(Sp, alternate years)

#### HIST 208 3 cr. History of the Mexican American/ Chicano

After a brief examination of Hispanic conquest and colonization, the course will emphasize the Chicano/Mexican American experience in the United States. Major themes will be expansionism, immigration, and economic development. Incorporated within this framework will be the different theories of internal colonialism, racism, and class segmentation. Special focus on the 1960's Chicano Movement will analyze the intellectual and cultural challenge to dominant group control. (Sp, alternate years)

#### HIST 210 Public History

An introduction to various career options and methodologies used by historians who do not teach. The topics covered include museum management, oral history, historic preservation, archival management, television and business applications. The student is encouraged to explore the full range of the uses of history. (Sp, alternate years)

#### **HIST 215**

#### United States History to 1865

The course, for history majors and minors, surveys American history from its beginnings to the end of the Civil War. The focus is on the development of American culture and identity and the factors influencing them such as class, ethnicity and race, gender, and economic and political forces. Prerequisites: HIST 101 or 102 or consent of instructor. (F, Sp).

#### HIST 216 U.S. History from 1865

The sophomore-level course, designed for history major and minors, provides an introduction to U.S. history from the end of the Civil War to the present. Emphasis will be on major political, social, economic and cultural developments during this period. Prerequisite: HIST 101 or HIST 102 or consent of instructor. (F, Sp).

HIST 220 Rise and Fall of Adolph Hitler	1 cr.
HIST 221 Great Battles	1 cr.
HIST 289	0.5-3 cr.

#### HIST 289 Special Topics in History

3 cr.

This course provides the opportunity to study a selected topic in history. (as needed)

1-3 cr.

3 cr.

3 cr.

### HIST 301 History of Film

Film Studies 301 is a survey of film history from its origins to today. The course will cover the major periods in film history by examining its innovators, major narrative forms, and major theories. The course will also look at the film industry and international influences. Co-listed as ENGL, FILM, JOUR, and SCTA 301.(yearly)

#### HIST 303 Women's History: Europe

The course traces the history of women in the Western world from the beginnings of civilization to the present. Emphasizing women's positions in classical antiquity, medieval and modern Europe, the course examines shifting structural patterns that shape women's lives and writings, cultural representations of women, and gender relations in western history and societies. Prerequisites: HIST 101 and 102 or consent of instructor. Co-listed as WMST 303. (occasionally)

#### **HIST 305**

3 cr.

3 cr.

3 cr.

Women's History: Global Perspective The course examines histories of women in diverse regions of the globe, focusing on Latin America, Africa, Asia and/or the Middle East. Emphasizing contemporary history (primarily nineteenth and twentieth centuries) and alternating regions, the course examines indigenous cultural patterns shaping women's histories, analyzes the impacts of western and imperialist cultural patterns on nonwestern women, and explores the complex, interdependent relationships between women in producing and consuming nations. Co-listed as WMST 305. (Sp, alternate years)

#### HIST 307 3 cr. Western Political Thought: Plato to Aq

### HIST 308

#### Renaissance to Marx

The course is an exploration of the major ideas and writers in the middle period of Western Political Philosophy. The course covers the period from the Renaissance through the mid-nineteenth century and emphasizes the ideas of Machiavelli, Moore, Hobbes, Locke, Rousseau, Kant, Hegel, Marx and Mill. Co-listed as HIST and PHIL 308/508. (F, alternate years)

#### HIST 309 3 cr. Western Political Thought: Nietzsche to the Present

The course is an exploration of the major ideas and writers in the recent period of western political philosophy. The course covers the period from the mid-nineteenth century to the present and emphasizes the ideas of Nietzsche, Pragmatism, Freud, Ortega, Arendt, Existentialism, Phenomenology and Post-Structuralism. Co-listed as HIST and PHIL 309/509. (Sp, alternate years)

#### HIST 310 3 cr. American Political Thought

The course is an examination of the history of the political ideas which have influenced American thinking about society, the state and government. The course covers material from the Puritan era through the present. Co-listed as HIST 310 (alternate years)

## HIST 320 3 cr. Ancient Rome

This course is an upper-level introduction to the history and civilization of Ancient Rome, from its beginnings in early Italy to the demise of the Empire in 476. Offered once every two-year period.

3 cr.

3 cr.

#### HIST 321 Early Middle Ages

This course is an introduction to early European societies and the Arab Near East from c. 400 to 1000. The course will familiarize students with the fundamentals of early medieval religion, politics, culture and economy. Offered every other year.

#### HIST 322 The Renaissance

The critical period of transition in European history from the end of the Middle Ages into early modern times. Study of the Renaissance from economic, social, political, and cultural aspects beginning in Italy and eventually including all of Europe, concluding with movements in England, France and Spain. Prerequisite: HIST 101 or consent of instructor. (Sp, alternate years)

## **HIST 323**

### **The Reformation**

European History from the mid-15th century to the late-17th century, a period commonly called early modern Europe. The course will examine the political tendencies in the rise of the modern state system, the religious changes and the major figures led by Martin Luther, the social and the economic developments, and the great wars which characterize this period. Prerequisite: HIST 101 or consent of instructor.(F, alternate years)

#### **HIST 324**

#### **Early Modern Europe**

This course is a survey of the major Western European developments during the early modern era. It offers students and overview of the European Renaissance, Reformation, Religious Wars, Absolutism, Enlightenment, and issues such as the expansion of the larger world, the rise of printing and literacy, etc. (Offered every other year).

## **HIST 325**

Late Middle Ages

This course introduces students to the radical transformation of Western societies in the course of the late medieval period. It covers the evolution of Western individuality, spirituality, state system, separation between church and state, value system, capitalist economy, crusades, exploration and conflicts with the Islamic world. (Offered every other year.)

#### **HIST 326 Bismark to Hitler**

An analysis of the unification of Germany , Bismarck's Second Reich, Parliamentary development, World War I, Revolution and Defeat, the Weimar Republic, the Third Reich under Hitler, the division of 1945, East and West Germany through the second unification of 1990. Prerequisite: HIST 102 or consent of instructor.(occasionally)

#### **HIST 327** WWI to WW II

An examination of the origins, nature and results of World War I, the rise of dictators, the weaknesses of the democracies, the origins of World War II first in Asia and then in Europe and the Fascist victories to 1941. Prerequisite: HIST 102 or consent of instructor.(Sp, alternate years)

#### **HIST 328** WW II to Cold War

The victory of the United Nations forces over Germany and Japan 1942-45, the postwar settlements, conflicts in Europe, Africa and Asia and the stages of the Cold War conflict to the collapse of the Soviet Union in 1991. Prerequisite: HIST 102 or consent of instructor. (Sp, alternate years)

### **HIST 330**

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

### **Revolutions in Modern History**

An introduction to the theory of revolution and a comparative approach to major revolutions in modern History: The English Revolutions of the 17th century; the French, Russian, Chinese, Cuban and Iranian Revolutions from the 18th century until the 20th. Prerequisite: HIST 102. (occasionally)

#### **HIST 332**

#### The Islamic Middle East to 1500

This course is an introduction to Muslim societies in the Near and the Middle East and Northern Africa from the time of the Prophet Muhammad to c. 1500. The course will familiarize students with the fundamentals of Islamic religion, politics, culture and economy. (Alternate Fall).

### **HIST 333**

Silk, Spices, and Silver: The Making of the Global Exchange System to 1700 This course is an investigation of the control of and trade in the strategic commodities of the pre-modern world such as spices, silver and gold, silk, and sugar. It examines the linkages between the Mediterranean world, the Middle East, India, and China in the period between 500 and 1700. Offered every other Fall.

### **HIST 334**

Modern China 1800 to Present This course is an in-depth survey of modern Chinese history from 1800 to present It will discuss the Western impact on China and the Chinese response to it, the transformation of traditional Chinese state and society after the 1911 revolution, the origins and evolution of Communist movement in China in the 20th century, and the impact of globalization on China's society and political system since the 1980s. Prerequisite: Jr. or Sr. (alternate years)

## **HIST 335**

Modern Japan 1600 to Present As a in-depth survey of modern Japanese history, this course discusses the erosion and collapse of feudalism in Japan, industrialization and constitutional reforms of Meiji Era, the rise and collapse of Japanese empire, and post WWII American occupation and its impact on Japan in the seconf half of the 20th century. Offered anually in Spring or Fall Semester.

#### **HIST 349**

#### **Middle Eastern History and Politics**

An overview of significant issues of Middle East history and politics including Islam and Islamic fundamentalism, the Ottoman presence, World War I in the Middle East. Modern State System, Arab-Israeli Conflict, petroleum and oil prices, regional wars and instability, American and European interest in the Middle East, and position of women in Middle East societies. Co-listed as HIST 349/549. (occasionally)

#### **HIST 351**

3 cr.

#### **United States Colonial History I** An examination of the origins of American civilization from pre-historic times to the early eighteenth century. Topics covered include: Native American foundations, early settlement, the rise and fall of Puritanism, administration of the empire, witchcraft and patterns of demographic and

territorial growth. (F, alternate years)

#### **HIST 352**

3 cr.

3 cr.

**United States Colonial History II** The development of American civilization in the eighteenth century including: The Great Awakening and the Enlightenment, the empire in transition and crisis, the American revolution, the emergence of people's government and the formation of the Constitution. (Sp, alternate years)

#### **HIST 353**

## United States History: 1790-1850

The nineteenth century marks a period of growth and development in American History. This course covers the social, political, economic and intellectual developments with specific reference to the first and second party systems, slavery and abolitionism, the reform movements and the industrial revolution.(F, alternate years)

#### **HIST 354**

3 cr.

United States History: Age of Growth 1850-1890 marked the period when the fundamental issues of conflict among the founding fathers exploded over the question of states' rights and the slavery issue. This course examines the political party system, slavery question and social reform, the Civil War, Reconstruction, the frontier and the emergence of the American Empire.(Sp, alternate years)

#### **HIST 356** 3 cr.

## **United States Middle Period**

### **HIST 358**

United States History 1890-1945 This advanced course will examine major shifts in national history focusing on economic, political, social and cultural developments. Special emphasis will be given to the closing of the frontier,

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

industrialization, the rise of corporate capitalism and the consumer culture, urbanization and immigration. The course will also examine the U.S. role in global politics through a study of American imperialism, World War I and World War II. Prerequisite: HIST 104 or consent of instructor. (F, alternate years)

#### HIST 359

**United States History from 1945** 

This advanced course will examine key political, economic, social and cultural developments of the cold war and post cold war era. Emphasis will be given to developing cold war policies and their national and global effects (especially in Korea, Vietnam and Latin America); the collapse of the liberal consensus; social movements of the 1960s; Watergate and its aftermath; the rise of conservatism and the culture of consumerism; and shifts in the post cold war national agenda. Prerequisite: HIST 104 or consent of instructor. (Sp, alternate years)

#### HIST 361 US Economic History

An analysis of the institutions which have shaped the American economy, from pre-colonial times to the present. Included will be an examination of the interacting forces responsible for American growth and power. Prerequisite: Sophomore standing or above. Co-listed as HIST 361. (F, alternate years)

#### HIST 364 History of the Upper Midwest: Furs,

Logs and Farms An exploration of the history of Wisconsin

and Minnesota from the invasion of the Ojibway to the twentieth century. Emphasis will be placed on the role of the frontier, industries such as timber and agriculture, and ethnic migrations in the development of the area. (Sp, alternate years)

#### HIST 366

Social History of the United States

Social history examines the lives of ordinary people generally those who did not leave historical records. The field represents one dominant trend in the historical profession in the last two decades. The course will focus on social histories from the earliest times on the North American continent to the present time and will include diverse ethnic groups, emphasizing the social histories of workers and immigrants, including women. Prerequisite: HIST 103 and HIST 104 or consent of the instructor. (occasionally)

### HIST 367

History of United States Foreign Policy

This course presents an analysis of United States foreign policy from 1776 to the present. The emphasis is upon expansion, both continental and commercial. Co-listed as HIST 367/567. (Sp, alternate years)

#### HIST 369

3 cr.

3 cr.

3 cr.

3 cr.

American Intellectual History The development of American thought from Puritanism to the present. Co-listed as PHIL 369. (occasionally)

#### HIST 370

**Professional Experience in History** This course provides an exposure to aspects of career choice and functions for historians by having students participate in workshops, conferences and work-site pursuits. Prerequisite: sophomore standing or above. (as needed)

### HIST 371 Study Tour Research

A course designed to provide credit for students involved in international or domestic study tours. The course involves directed readings, the study tour itself and the writing of a paper or papers. The study tour itself need not be offered by the History Department. (as needed)

#### HIST 378 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)

#### HIST 379 Internship in History

The course provides an intensive training experience in an aspect of the work of historical agencies such as curating, exhibit work, registration, interpretation and administration. Prerequisite: Sophomore or above and consent of instructor and approval by the Dean, College of Arts and Sciences. (F, Sp)

#### HIST 385

Seminar: the American Frontier

Focusing on major themes and images in the perception of the American Frontier experience, the course is a joint participation seminar with Geography and English. Sources from history, literature and geography are used. Co-listed as ENGL/GEOG 385. (Sp, alternate years)

### HIST 389

3 cr.

3 cr.

1-2 cr.

1-3 cr.

3-6 cr.

3-8 cr.

3 cr.

#### Special Topics in History

This course provides the opportunity to study a selected topic in history. (as needed)

## HIST 401

#### **Colonial Study Tour**

This course is a two-week tour of early American history by luxury-coach bus. Through a blend of organized tours and free time to explore, educators will learn more about our colonial beginnings, slavery and the history of the Civil War. The tour itinerary includes visits to Gettysburg National Park, Thomas Jefferson's home in Monticello, Jamestown and the 1607 Settlement site, Yorktown, Colonial Williamsburg, Mount Vernon, the US Constitution Center and Independence Hall in Philadelphia, Washington D.C., Valley Forge, Fort Necessity National Park, and the new Underground Railroad Freedom Center in Cincinnati.(SS)

#### HIST 402 History in Film

The course explores the presentation and construction of history through film. Students will analyze how the interpretations and meanings of history shift over time and how films both shape and challenge the public's view of history. The course content varies according to historical period and instructor. The course may be taken twice, once with a US topic and once with a world topic. Offered periodically, about once a year.

#### HIST 415 Philosophy of History

This course will explore general theories of history, moving from ancient, classical and modern theories to postmodern and feminist critiques of historical writing. Emphasizing key texts and thinkers, the course will examine issues surrounding the meanings of history, historical explanations, concepts of progression, objectivity, and the uses of history. Prerequisites: senior standing or consent of the instructor.(occa sionally)

#### HIST 416 Constitutional Law

An examination of major Constitutional issues throughout American history. Issues addressed will include the powers of government and the rights and freedoms of individuals. Special emphasis will be placed on the role of the Supreme Court in American politics. Prerequisites: junior standing, previous work in political science or American history. Co-listed as POLS 416. (alternate years)

0.5-3 cr.

2 cr.

3 cr.

3 cr.

#### **HIST 436**

#### History of Colonial and Imperialism

Analysis of early episodes of colonialism stemming from the Spanish, British and Dutch settlement of the New World and parts of Asia and Africa, the rise and fall of modern empires and of the interaction of imperialism and nationalism; the retreat of old-style imperialism, the successes and failures of new style imperialism representing both nation-states and the power of international corporations. Analysis of Communist imperialism.(occa sionally)

HIST 445	
Historical	Conservation Lab

#### HIST 460 History Colloquium

#### **HIST 481**

#### Material and Popular Culture

Selected areas within the realm of material and popular culture in the United States will be studied. Topics will vary but will include advertising, art, songs, etc. Material culture is the realm of three-dimensional objects that make up our everyday environment. Popular culture is the sum of ideas, activities and fads that have been or are part of our lives. This course examines how these two areas have developed during American history and how they impact on the development of culture. (F, alternate years)

HIST 483	4 cr
<b>Reading Seminar:</b>	Race and Ethnicity

#### HIST 485 History Seminar

The history seminar provides a synthesis of historical study for history majors and minors. The seminar explores current issues in historical theory and method, examines a specific topic historiographically, and culminates with student's independent research project. Prerequisite: Major or minor in history. (F, Sp)

#### **HIST 486**

#### Seminar: History of the Americas

This course will cover various topics relating to the history of the Americas. The topics may change depending on the instructor. The Americas are defined as including the United States, Latin America and Canada. Specific offerings may focus on one or more of the regions. Emphasis will be on methodology and/or historiographical aspects of historical research focusing on a specific subject relevant to the history of the Americas. The coursework will require both reading and the completion of a major research project. (occasionally)

#### HIST 489

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

4 cr.

#### **Special Topics in History**

This course provides the opportunity to study a selected topic in history. (as needed)

HIST 490					1-4 0	er.	
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#### **Readings in History**

This course is offered for advanced students who desire to study a specific topic or period of history in an intense way under the supervision of a specialist. The usual formula is to read at least three books or 800 pages per credit, and to write a series of reports, as outlined after consultation with the instructor. No more than two cr. a semester are permitted, not more than four cr. in a major. Prerequisite: Written consent of the instructor and filling out History and Philosophy Department's Independent Study Contract. (F, Sp, SS)

#### HIST 499 Independent Study

Students will pursue a given history topic in depth. Prerequisite: consent of instructor and filling out History and Philosophy Department's Independent Study Contract.(F, Sp, SS)

1-3 cr.

#### HONORS

HON 166 Honors Calculus I	1 cr.
HON 167 Honors Calculus II	1 cr.
HON 181	1 cr.

#### **Freshman Honors Seminar**

This course is required of all participants, preferably in the first year of enrollment. It will include an orientation to the Honors Program and other topics selected by the instructor. This course may be repeated.

HON 190	
Freshman Seminar	

### HON 271

#### **Honors Events**

This elective is meant to encourage Honors Program participants to engage in the intellectual and creative life of the UW-River Falls community and elsewhere. Events include a host of experiences including concerts, lectures, plays, and art exhibits. This course can be repeated and is graded on a pass/fail basis. Participants must provide a short reaction paper for each event and appropriate evidence of attendance. Five events equals one credit.

#### HON 283 Honors Seminar

HON 284	2 cr.
Multicultural American Music	

#### 0.5-3 cr. HON 371

#### **Honors Service Learning**

Service learning means unpaid service work that will benefit the community and provide a significant learning experience for the student. One credit of service learning equals 45 hours of actual service learning experience. This independent experience must be documented as to the amount of time contributed and the learning component completed. This course is repeatable and graded on a pass/fail basis.

1-3 cr.

HON 381 Junior Honors Seminar This course is not required. It may be repeated.	1 cr.
HON 385 Honors Seminar	3 cr.
HON 390 Junior Seminar	1 cr.
HON 498 Honors Project Required of all participants during ju	<b>1-3 cr.</b> nior

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.

HON 499 1-2 cr. Honors Project

#### HORTICULTURE

### HORT 120

1 cr.

1 cr.

3 cr.

### Plants and Society

3 cr.

This course will investigate how plants have been manipulated to promote the development of modern societies. Specifically, the course will focus on how global crop production interconnects societies, provides food, fiber, medicine and aesthetics. It will emphasize the contemporary issues of agriculture. Ethical citizenship will be emphasized in regards to land stewardship and social responsibilities.

### HORT 161

#### Introduction to Plant Science

Students will study the morphology, growth and economic utilization of plants. The effects of environmental factors such as light, temperature and moisture on growth

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and yield are examined. The laboratory provides an opportunity to closely examine and carry out experiments on plant material. Lab fee required. Co-listed as HORT 161. (F, Sp)

#### **HORT 169**

#### Introduction to Horticulture

This course emphasizes the basic fundamentals and practical cultural practices for successfully growing horticultural plants in the home and garden as well as in commercial production situations. The theoretical basis for these practices will be stressed. Prerequisites: HORT or CROP 161, or consent of instructor. Lab fee required. (F, Sp)

#### **HORT 200**

#### **Plant Propagation**

Students will study the principles and practices involved in sexual and asexual propagation of horticultural plants. Prerequisites: HORT or CROP 161.(F)

HORT 240	3 cr.
Plant Interiorscaping	

HORT 245	
Interior Plantscapes	

The installation, maintenance, and management of interior plantscapes are discussed from a commercial application point of view. Identification of approximately 140 appropriate foliage plants is also an integral part of the course. Prerequisites: HORT 169, or consent of instructor. (Sp, alternate years)

HORT 250 3 cr.
Principles of Landscaping
Principles of landscape design, especially
as these relate to home grounds
development (rural and urban) and an
introduction to landscape plant materials
and their functional and aesthetic roles in
the landscape are included in the course.
Also covered are landscape contracting
and landscape maintenance practices.
Prerequisite: HORT 169, HORT or CROP
161, or consent of instructor.(Sp)

#### **HORT 268**

#### **Herbaceous Perennials**

The identification, culture, production, maintenance and landscape utilization of herbaceous perennial plants will be examined. Prerequisite: HORT 169, or consent of instructor.(F, alternate years)

#### HORT 270 Internship I

Students obtain professional work experience with a cooperating employer. Individualized learning objectives are established for each participant. The completion of a special project at the internship site is an integral part of the experience. Prerequisites: 30 cr. and consent of director and faculty coordinator.(F, Sp, SS)

#### **HORT 271**

3 cr.

3 cr.

3 cr.

3 cr.

2-4 cr.

#### International Internship

An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Prerequisites: 30 semester credits. Special course fees required.(F, Sp, SS)

#### **HORT 289**

### HORT 310

**Special Topics in Horticulture** 

#### **Greenhouse Management**

Students will study greenhouse structures, environmental control, cultural techniques and general management practices for the commercial production of greenhouse crops. Prerequisite: HORT 169. (F)

#### HORT 327 Vegetable Science and Production

Students will study the commercial production of fresh market and processing vegetables in the United States, with emphasis on the Midwest. Systematics, site selection, cultural and management practices, and physiological and environmental control of vegetable plant development will be discussed. Prerequisites: HORT or CROP 161 and HORT 169, or consent of instructor. (Sp)

#### **HORT 347**

**Fruit Science and Production** Students will study the commercial production of temperate zone small fruits and tree fruits. Site selection, environmental effects and modifications, cultural and management practices, pollination, pruning, soil management, thinning, irrigation, pest control, post harvest physiology, and marketing are discussed. Prerequisites: HORT or CROP 161, and HORT 169, or

### HORT 352

#### **Ornamental Plants**

consent of instructor. (F)

Students will study the identification, classification, environmental requirements, and cultural requirements of about 120 woody ornamental plants commonly used in the outdoor landscape in the Upper Midwest. Prerequisites: HORT or CROP 161, or consent of instructor.(F)

#### HORT 358 Landscape Design Practicum

This course reinforces the use of landscape design theory and appropriate plant selection through a series of problem solving exercises in which students will create and discuss design solutions. Professional landscape presentation techniques and professional approaches to design practice will be included. Prerequisites: HORT 250, 268, and 352 or consent of instructor.

3 cr.

### HORT 369

4 cr.

0.5-3 cr.

3 cr.

4 cr.

4 cr.

3 cr.

2 cr.

### Plant Tissue Culture

This course provides a survey of current plant tissue culture methodologies and applications. Topics covered include: rapid clonal propagation, protoplast fusion and cell culture, haploid plant generation, disease indexing, and shoot tip micro-grafting. Students will gain hands on experience in a plant tissue culture laboratory. A useful course for biotechnology and graduate schoolbound students. Prerequisites: CROP or HORT 161, or HORT 200, or consent of instructor.(Sp)

#### HORT 370 2-4 cr. Internship II

An advanced professional work experience with a cooperating employer. Individualized learning objectives are established for each participant. The completion of a special project at the internship site is an integral part of the experience. Prerequisites: HORT 270 and consent of director and faculty coordinator.(F, Sp,SS)

#### HORT 378 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)

#### HORT 379 3 cr. Geology and Public Gardens of Southern England

A study trip visiting classic geology and public gardens in Southern England. Study the geological history and development of Southern England, including coastal erosion and deposition that are currently modifying the area. Evolving garden design and botanical diversity will be studied during visits to historic and modern English gardens. Prerequisites: GEOL 101 or HORT 169 or equivalent and/or permission of instructor.

HORT 389	0.5-3 cr.
Special Topics in Horticulture	

4 cr.

### HORT 420 Floriculture

Students will study the theoretical and practical aspects of effective production

and crop management techniques for selected floral crops commonly grown in the commercial greenhouse industry. Basic crop morphology, propagation, fertilization, environmental responses, control of flowering, and post harvest care will be discussed for each crop. Crop production scheduling, marketing channels, and other selected management topics will be included. Prerequisites: Junior or Senior standing, and HORT 169, or BIOL 210. (Sp)

#### **HORT 452**

Arboriculture and Nursery Management Students will study theories relative to cultural practices and techniques essential to the installation, maintenance and preservation of woody ornamental plants, emphasizing commercial practices. Practical and theoretical aspects of container and field nursery production and management practices in the upper Midwest are examined. Prerequisites: CROP or HORT 161 and HORT 169. (Sp, alternate years)

#### **HORT 455**

3 cr.

1 cr.

1-3 cr.

3 cr.

**TurfGrass Science and Management** Students will study the principles and practices used in establishing and maintaining turfgrass areas including the management of lawns, parks, athletic fields, and golf courses. Prerequisites: SOIL 210 and HORT or CROP 161, or consent of instructor.(Sp)

#### HORT 485 Senior Seminar

The student chooses a topic (with the

consent of the instructor) of current interest in horticultural science and conducts a comprehensive investigation of the scientific literature relevant to that topic. The student summarizes the results of the investigation in an oral presentation to his/her peers using appropriate visual aids. The student will also critique presentations by other students in the class. Prerequisite: Senior standing. (F, Sp)

HORT 489	0.5-3 cr.
Special Topics in Horticulture	

#### HORT 490 Independent Study

Students will perform independent study and/or conduct a research project under the supervision of a faculty member. Prerequisites: consent of instructor.(F, Sp)

#### **HUMANITIES HONORS**

HUHO 282 Gender and Cont Cult	3
HUHO 287 Science and Human Values	2

#### HUMANITIES

HUM 210	
Women in the Arts	

#### HUM 261 World Arts

An interdepartmental course offered as an introductory immersion in an international cultural and arts environment with a Scottish art emphasis. The course will provide both a sociological and historical as well as an artistic perspective to students new to this international experience. Intensive one week course including introductory discussions, events attendance, written critical review of art, music, dance, and theatre in conjunction with the Edinburgh International Festival.(F)

#### HUM 289 0.5-3 cr. Special Topics in Humanities

HUM 300 3 cr. Multidisciplinary Human Perspectives Consideration of representaive works in the humanites - aret, architecture, history, literature, amusic, and philosophy - from several periods of history, focusing on the 19th and 20th centuries, with application of multidisciplinary perspectives to enduring and topical issues. The course fosters a life-long appreciation of humanities. Note: students may not tkae HUM 300 and IHUM 498 and receive credit for both courses. perrequisite: Completion of CW and Junior standing. (F,Sp)

#### HUM 311 4 cr. Arts and Ideas I: Classical Greece to the Renaissance

An integrated study of the history and literature, as well as art, music, philosophy, and drama of classical Greece, imperial Rome, Early Christian Europe, the High Middle Ages, the Renaissance in Italy, the Reformation and the Northern Renaissance. Travel costs for one or more optional field trips to Twin Cities art exhibits, concerts, or plays will be met by students. Prerequisites: sophomore standing or above, cumulative GPA of 3.0 or higher and completion of CW or permission of instructor. (F)

#### HUM 312

cr.

cr.

3 cr.

1-2 cr.

# Arts and Ideas II: The Baroque to the Postmodern

An integrated study of Absolutism in France, and the Age of Enlightenment in Europe, the French Revolution and Romanticism, Realism and the Industrial Revolution, Nationalism, modernism in the arts, the Russian Revolution and the rise of totalitarianism, socially committed art, and existentialism. Travel costs for one or more optional field trips to Twin Cities concerts, plays or art museums will be met by students. Prerequisites: Cumulative GPA

of 3.0 or higher and completion of CW requirement or permission of instructor. (Sp)

HUM 389	0.5-3 cr.
Special Topics in Humanities	
HUM 489	0.5-3 cr.
Special Topics in Humanities	

#### INTERDISCIPLINARY HUMANITIES

#### **IHUM 498**

2 cr.

4 cr.

Senior Capstone - Humanities A General Education course designed for senior students. Integration of the humanities art, architecture, literature, music and philosophy through consideration of representative works from several periods of history, focusing on the 19th and 20th centuries but including selections from either the classical, medieval or renaissance periods. An arts unit is also included. While the course is historically organized, the course is thematic in its orientation. It is interdisciplinary and may be team taught. Prerequisites: completion of all lower division General Education requirements and senior standing. (F, Sp, SS)

#### INTERDISCIPLINARY SCIENCE

#### **ISCI 497**

#### Senior Capstone - Science

A General Education course designed for senior students. This course is designed to give students an understanding of the assumptions and methodologies of the scientific approach to knowledge and the impact of scientific ideas on society. Discussions will include historical development of important scientific ideas and the interaction of science, technology and society. It is interdisciplinary and may be team taught. Prerequisite: senior standing.(F, Sp, SS)

# INTERDISCIPLINARY SOCIAL SCIENCE

2 cr.

3 cr.

3 cr.

1-3 cr.

#### ISSC 496

#### Senior Capstone - Social Science

A General Education course designed for senior students. This course examines the vital concepts of human society and of their application to the issues of the modern world. It is interdisciplinary and may be team taught. Prerequisite: Senior standing.(F,Sp,SS)

#### **INTERNATIONAL STUDIES**

#### **INTS 200**

**Introduction to International Studies** This interdisciplinary course introduces students to the importance of international studies and global issues. General themes that the course examines may include, but are not limited to, global geography, inequality, population, culture, the environment, economics, food, interdependence, political systems, gender issues, and conflict resolution. (F)

INTS 289	1-3 cr.
Topics in International Studies	

#### **INTS 365**

#### **Contemporary Europe (g)**

This course examines contemporary Europe by exploring topics such as, but not limited to, European history, culture, geography, politics, and literature. It also explores Europe's historical and contemporary role in international affairs. This is the core course for students accepted as participants in the International Traveling Classroom. (Sp)

### INTS 370

#### **International Study Tour**

International study tours are designed to allow students to study a specific issue, or issues, in one or more countries. The specific topic, or topics, that the tour addresses will vary depending upon the term and tour leader. The course involves attending several orientation seminars, directed readings, the tour itself, the writing of a paper (or papers), and other requirements as identified for the specific tour. Prerequisites: sophomore standing or higher, and satisfactory participation in orientation seminars as directed. (upon request)

INTS 375	12-12 cr.
St. Martins Exchange	

INTS 377			6 cr.
Semester A	broad		

A semester of directed research and independent travel in Europe. This course

is to be taken in conjunction with 378/578 in a subject area. Students will prepare a research project in a subject area (during spring semester) and carry out the research project in a European country during fall semester. The research period is from eight to ten weeks; students will be free to travel during the remaining part of the semester. Semester Abroad is open to students in all university disciplines. Prerequisites: participation in the Semester Abroad orientation seminar; 2.25 GPA; junior or senior standing. Students must apply before February 15 of the previous spring semester and attend the orientation seminar, then register for 377/577 and 378/578 for fall semester.(F)

#### INTS 379 Internship in International Studies

The internship is designed to allow the student to gain college credit through practical work experience with domestic, foreign, or international institutions and organizations that have an international focus. Prerequisite: Student must be an International Studies Minor, possess language and other skills appropriate to the internship position, and obtain the consent of the program coordinator for the International Studies Minor prior to registration for the course.(F, Sp, SS)

#### INTS 389 Topics in International Studies

This course is designed as an in-depth examination of a specialized topic, or topics, in international studies. The specific issues will be designated whenever the course is offered. (upon request)

### INTS 442

World Cinema (g) View the world through many nationsA? cultural and historical vantage points, and increase your facility with film language, artistic form and the worldA?s cultures for your studentA?s benefit and your own enjoyment. (F, or Sp, alternate years)

INTS 480	3 cr.
International Studies Senior Semina	ır

INTS 481 12-12 cr. Wisconsin in Scotland

#### **INTS 490**

**Readings in International Studies** This course is designed for students who desire advanced reading and discussion of a topic developed in consultation with the program coordinator for the International Studies Minor. Prerequisite: Student must be an International Studies Minor and obtain the consent of the program coordinator for the International Studies Minor.(F, Sp,SS)

#### INTS 499 Independent Study

1-3 cr.

4 cr.

3 cr.

The course allows an intensive exploration of a particular problem or phenomenon identified within the framework of international studies. Prerequisite: Student must be an International Studies Minor and obtain the consent of the program coordinator for the International Studies Minor.(F, Sp, SS)

#### **JAPANESE**

2-6 cr.

1-3 cr.

3 cr.

1-3 cr.

#### JAPN 101 Beginning Japanese I

An introduction to the study of Japanese. Basic vocabulary, conversation and cultural material. 101 presumes no previous study of the language.(F)

### JAPN 102 4 cr. Beginning Japanese II

Continuation of the study of Japanese. Basic vocabulary, conversation and cultural material. Prerequisite: JAPN 101 or equivalent. (Sp)

### **JAPN 201**

**Intermediate Japanese I** Review of basics of Japanese Grammar; introduction of new grammatical concepts; conversation, culture and reading.

## JAPN 202 3 cr.

Prerequisite: JAPN 102 or equivalent. (F)

Intermediate Japanese II Continuation of Japanese grammar, conversation, culture and reading. Prerequisite: JAPN 201 or equivalent.(Sp)

JAPN 289 Special Topics in Japanese	0.5-3 cr.
JAPN 389	0.5-3 cr.
Special Topics in Japanese	
JAPN 489	0.5-3 cr.
Special Topics in Japanese	
JAPN 490	1-3 cr.

### Readings in Japanese

### JOURNALISM

JOUR 101 3 cr. Introduction to Mass Communication An introductory survey and analysis of the role of the mass media in society, their operation and performance as disseminators of entertainment, news and information and determiners of values, opinions and attitudes.(F,Sp)

## JOUR 110

### Principles of Journalism

This course in an overview of the journalism profession. It focuses on the nature of news, the news industry, reporting tools, story telling and ethical and legal issues.

#### **JOUR 121**

#### **Radio News Production**

A practical introduction to radio production using field and studio equipment with an emphasis on the technical skills used in news, public affairs and documentary production. A course fee of \$20 for audio supplies will be added to tuition. (F, SP)

#### **JOUR 122**

**TV News Photography** 

#### A practical introduction to television news photography with an emphasis on the skills and equipment used in electronic newsgathering. Course fee of \$40 for video supplies will be added to tuition. (Sp)

#### **JOUR 123**

**Editing for Print Media** 

Students will receive intensive training in editing news material for print media using a desktop publishing program. Editing skills include writing headlines, cutlines and news digests; editing copy, photography and graphic art; and making news judgements based on legal, ethical and diversity issues. (F)

#### JOUR 124 Editing for Online Media

2 cr.

3 cr.

3 cr.

2 cr.

2 cr.

#### Students will learn how to construct and edit a news website modeled on the best practices of journalism. This hands-on course will cover live editing, writing styles, legal and ethical issues, media convergence, and website organization and design.

#### **JOUR 201**

#### **Information Gathering**

An introduction to the news gathering process with an emphasis on examining records, interviewing news sources, evaluating credibility of Internet sources and analyzing newsworthiness of information. Prerequisite: JOUR 110.

#### **JOUR 202**

#### **Print News Writing**

An introduction to the styles of news writing for the print media, with an emphasis on writing public-affairs news stories, and on writing fairly and accurately for diverse audiences. Students write several basic news stories. Prerequisite: JOUR 201.(Sp)

## 3 cr. JOUR 203

#### **Broadcast News Writing**

Instruction and practice in evaluating and writing broadcast news copy for radio and television. Course fee of \$15 for audio and video supplies will be added to tuition. Prerequisite: JOUR 201.(Sp)

### 2 cr. JOUR 230

#### Agricultural Newswriting

This is a writing intensive course. Students will review journalistic writing techniques that include copy-editing, style, spelling, policy and ethics. Students proceed to discuss and practice specific agricultural writing topics. Practical experience is gained by submitting stories to The FencePost, the College of Agriculture, Food and Environmental Sciences' alumni newsletter; Student Voice, the campus newspaper; The Country Today, a weekly rural publication; CAFES' Cable/TV; and to additional print media open to publishing student work. Visits by media professionals and tours are incorporated into this class. Co-listed as JOUR 230. Prerequisites: AGED110, JOUR 112. (Sp)

#### **JOUR 240**

#### **Introduction to Visual Communication** Students will interpret, analyze and construct visual messages used in journalism and public relations, including typography, photography, page design and informational graphics. Online lecture plus computer lab. No prerequisites.(F, Sp)

#### JOUR 245 Writing Film and Television

Techniques in writing for the documentary/ factual film, feature films and television will be examined. (SP,alternate years)

#### JOUR 266 Photojournalism

Students learn visual reporting techniques and digitized imaging technology through both class and Student Voice photo assignments. Legal and ethical issues facing photojournalists will be covered. Prerequisite: JOUR 265. (Sp, alternate years)

## **JOUR 269**

**Feature Writing** Students will study and practice the techniques utilized in feature writing in newspapers and magazines.(Sp, alernate years)

<b>JOUR 289</b>	0.5-3 cr.
Special Topics in Journalism	

### **JOUR 301**

#### **History of Film**

A survey of film history from its origins to today. The course will cover the major

periods in film history by examining the innovators, major narrative forms and major theories. The course will also look at the film industry and international influence. Co-listed as ENGL, FILM, HIST, and SCTA 301.

#### **JOUR 302**

#### History of Documentary

This course examines the history and techniques of the nonfiction film. It involves analysis of historical examples of documentary film (including newsreels, propaganda films and television documentaries) along with the works of prominent documentary makers and styles of documentary production. Co-listed as FILM 302. (F, alternate years)

#### **JOUR 303**

3 cr.

3 cr.

#### **Documentary Production** An examination of the principles and techniques used in creating political, educational and social commentary documentaries. Emphasizes the chill

documentaries. Emphasizes the skills needed to research, write, and produce a TV or radio documentary from concept to finished product focusing on research, preproduction planning, and shooting/ recording, editing and presentation. Prerequisite: Jour 121 or 122 or Film 260 or SCTA 260. Co listed as FILM 303 and SCTA 303.

#### **JOUR 304**

#### **News Practicum**

Students will report for one of the student news media outlets. Student stories will be critiqued in class. Additional class discussions will cover current issues in journalism and the characteristics of various news media formats. Students will present a portfolio of their work at the end of the semester. This course may be repeatable once, totaling a maximum of 4 credits. Prerequisites: JOUR 202 or 203 and JOUR 121, 122, 123 or 124.

#### **JOUR 305**

#### News in the Movies

3 cr.

2 cr.

American films illustrate the public's love/hate relationship with journalism. Reporters are portrayed as "good guys" (crusaders, detectives, heroes) and "bad guys" (scandalmongers, drunks and villains). The course will focus on the changing image of journalists from early to recent movies and the effects those images have on public perception. Co-listed as FILM 305. (SP, alternate years).

#### JOUR 316 Media Ethics

3 cr.

Philosophical examination of selected issues in professional journalism, public relations, and marketing communication: the aims of journalism,

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

journalistic objectivity, advertising ethics, newsworthiness vs. privacy vs. sensationalism, ethics of photojournalism, public relations and the public interest.(yearly)

#### **JOUR 319**

#### **Media and American Politics**

This course explores changes that have occurred in the American polity as a result of the increasingly dominant role played by the mass media in framing American politics. The course will focus on the implications of these changes for the meaning and practice of democratic politics. The course will take a broad perspective on the mass media and will include discussions of the impact of popular culture, as well as that of the news media, on our politics. Co-listed as POLS 319. (alternate years)

#### **JOUR 320**

#### Journalism and Public Opinion

The nature of public opinion, its formation and role in a democratic society will be studied. Co-listed as POLS 320. (F)

#### **JOUR 340**

#### **Media Management**

This course includes a thorough examination of media management principles and operations. It will study newspapers, radio, television and Internet by focusing on organizational structures, consolidation, and promotional and positioning efforts. (Sp, alternate years)

#### **JOUR 345**

#### **History of Mass Communication**

Students will study the political, social and ethnic diversity of American media from the Colonial Period to the present. The media's role in the nation's development will be examined. (Sp)

#### **JOUR 360 Opinion Writing**

Principles and practice in writing and producing editorials, editorial pages, personal columns and arts reviews. The role of opinion writing for both print and electronic media will be considered.(F, alternate years)

#### **JOUR 370 Public Relations**

The course considers the role of public relations as a persuasive function serving both the business and public sectors. It stresses the organization and function of public relations, and the theories and ethics or PR practice. Prerequisite: MARC 100 or permission of instructor. (F).

#### **JOUR 371 Public Relations Methods**

This is a writing intensive course. The course focuses on the methods of producing public relations materials including news releases, articles, newsletters, press events, audio and video news kits, and the utilization of the Internet and World Wide Web. Prerequisites: MARC/JOUR 370 (previously JOUR 260) or consent of instructor. (Sp).

### **JOUR 378**

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

Semester Abroad Research

#### The research component of the Semester Abroad program. 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)

## Internship in Journalism

Students will earn credit for a 150-hour work experience with an approved communications medium. Prerequisites: completion of sophomore year and written approval of department chair. Pass/Fail basis.(F,Sp,SS)

#### **JOUR 385**

Media Workshop

#### **JOUR 389** 0.5-3 cr. Special Topics in Journalism and Mass Communication

An in-depth examination of a specialized topic in journalism and mass comunications. (alternate years or upon student request)

#### **JOUR 455**

#### Mass Media and Society Students will explore how society and mass media (television, radio, film, magazines, books, and the Internet) influence each other. Various theories that provide a framework for discussing the roles of media in society will be examined. Students will discuss the trend of a few, gigantic and global conglomerates owning more mass media, and opinions as to the consequences of this trend. The course will also present contrasting views of hotly debated media issues including violence in the media, bias and representations of race, class, gender and sexuality in the media. (Sp, alternate years)

### **JOUR 460**

#### **International Communication**

A comparative study of the mass media around the globe with a particular emphasis on the role of mass media in developing countries. (Sp, alternate years)

#### **JOUR 465**

3 cr.

#### Mass Communication Law

This is a writing intensive course. It includes a legal description of the rights, privileges and responsibilities of the mass media and examines issues such as libel and privacy, censorship, broadcast regulation, copyright, reporters' rights, obscenity, fair trial-free press and advertising regulation. Prerequisite: senior standing.(F)

#### **JOUR 489** 3 cr. **Special Topics in Journalism**

An in-depth examination of a specialized topic in journalism and mass communicatio ns.(alternate years or upon student request)

#### **JOUR 490** 1-3 cr. **Readings in Journalism and Mass** Communication

This course is for upper division students who desire to conduct research on some particular problem or issue in the field of journalism and mass communication. Prerequisite: consent of department chairperson.(F, Sp, SS)

#### **JOUR 499** 1-3 cr. Independent Projects in Journalism and **Mass Communication**

The course provides an opportunity for upper division students to select a project in journalism and mass communication and to work independently with an assigned faculty supervisor. Prerequisites: consent of department chair.(F, Sp,SS)

### MARKETING **COMMUNICATIONS**

#### **MARC 100** Writing for Mass Media

An introduction to the different writing styles used in public relations, advertising and promotions. (F, Sp)

3 cr.

3 cr.

#### **MARC 200 Introduction to Marketing** Communication

This course is designed to increase the student's understanding of marketing communications - theory and practice - in today's environment. The first half of the course focuses on the areas of advertising and communications; the second half provides an overview of promotional, public relations, direct marketing and personal selling communications. The technology lab component will provide operational skills in tools currently used by marketing communications professionals including word processing, presentational graphics, relational databases, desktop publishing, and Internet/World Wide Web access. Required of all Marketing

186

3 cr.

2-3 cr.

3 cr.

3 cr.

3-6 cr.

# **JOUR 379**

Communications majors. Prerequisite: Sophomore standing.(F, Sp)

#### **MARC 279**

## Cooperative Education and Internship

Students earn credit for a part-time experience in marketing communications. A maximum of one credit per semester may be earned for each 279 experience, but this may be repeated up to a total of 4 credits. The Marketing Communication work experience/internship requirement may be fulfilled by a combination of 279 and 379 in AandS or SBE for a maximum of 4 sem. hrs. Prerequisites: Sophomore standing, completion of MARC 200 and approval of Marketing Communications internship coordinator. (F, Sp, SS)

#### MARC 360 Advertising

A study of the history, current practices, and environment (social, ethical, economic and legal) of the advertising industry. (Sp).

#### MARC 361 Advertising Methods

Practice in conceptualizing and preparing advertising for both print and broadcast media. Includes copy writing, layout, design, the graphic arts, and broadcast production of advertising materials. Prerequisites: MARC 360 (previously JOUR 362) or consent of instructor. (F).

#### MARC 370 Public Relations

The course considers the role of public relations as a persuasive function serving both the business and public sectors. It stresses the organization and function of public relations, and the theories and ethics or PR practice. Prerequisite: MARC 100 or permission of instructor. (F).

#### MARC 371 Public Relations Methods

This is a writing intensive course. The course focuses on the methods of producing public relations materials including news releases, articles, newsletters, press events, audio and video news kits, and the utilization of the Internet and World Wide Web. Prerequisites: MARC/JOUR 370 (previously JOUR 260) or consent of instructor. (Sp).

#### MARC 378 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)

#### MARC 379

1 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3-6 cr.

Marketing Communications Internship

Students earn credit for a full or part-time work experience within an approved marketing communications field. Experiences must be at the professional level. Students may earn 4 credits by successfully completing one or more internships. The Marketing Communications work experience/ internship requirement may be fulfilled by a combination of 279 and 379 for a maximum of Prerequisites: Completion of sophomore year, completion of MARC 200, approval of Marketing Communications internship coordinator. (F, Sp, SS)

#### **MARC 480**

Seminar: Marketing Communications A senior level discussion of current marketing communications issues. In addition, techniques for preparing for careers in marketing communications will be emphasized with practical application projects. Portfolio presentations will also be included. Required of all marketing communications majors. Prerequisites: Completion of all other Marketing Communications core requirements and senior standing.(F, Sp)

### MATHEMATICS

#### MATH 10 Introduction to Algebra

Properties of sets and real numbers, fundamental operations, factoring, fractions, and linear equations are examined. Degree credit will not be given. Prerequisite: Students with a Wisconsin Math Placement Test Score of 10 and an ACT math score below 20 must take both MATH 010 and MATH 030. (F)

#### MATH 30 Intermediate Algebra

Properties of the real number system, solutions of linear and quadratic equations and inequalities, factoring and graphing are examined. Degree credit will not be given. Required of students whose score on the Wisconsin MATH Placement Test is 20 or 30 and whose ACT math score is below 20. Prerequisite: MATH 010 or Wisconsin MATH Placement test score of as least 20. (F,Sp)

#### MATH 126 Activities in Math

2-4 cr.

A survey in breadth rather than depth of a variety of mathematical topics. While emphasis is on the spirit, concepts and structure of modern mathematics, manipulative skills and techniques are also developed. Prerequisite: WPT Math Formula score of 40+, ACT Math score of 20+, or Math 30. (F, Sp, SS upon student request)

#### MATH 146 College Algebra

3 cr.

3 cr.

Properties of the real number system, relations, functions, solution of equations and solution of inequalities. Special attention is given to the analysis and graphing of linear, quadratic, polynomial, exponential and logarithmic functions. Prerequisite: WPT Math Formula score of 40+, ACT Math score of 20+, or Math 30 . May not be taken after receiving a C or better in a math course with a higher number except 216, 246, 247 or 248. (F,Sp,SS)

#### MATH 147

3 cr.

3 cr.

3 cr.

3 cr.

**College Algebra and Trigonometry** Circular and trigonometric functions, matrices and determinants, systems of equations, complex numbers, sequences, series, mathematical induction and the binomial theorem are examined. Students who intend to take MATH 166 are encouraged to take MATH 149 rather than MATH 147. Prerequisite: MATH 146 or equivalent. May not be taken after receiving a C or better in a math course with a higher number, except 216,246, 247 or 248. (F, Sp; SS upon student request)

#### MATH 149 Precalculus

This course reviews algebra, while covering new topics in algebra and trigonometry with emphasis on those topics needed for the study of calculus. It is designed for students who intend to take MATH 166. Prerequisite: MATH 146 or equivalent. May not be taken after receiving credit for 147 or any math course with a higher number except 216, 246, 247 or 248. (F, Sp)

#### **MATH 156**

3 cr.

4 cr.

**Calculus for Business and Social Science** This course is designed to provide a foundation in those topics of calculus that are relevant to students in managerial, life and social sciences. It begins with the study of functions and progresses through single and multivariable calculus. Prerequisite: MATH 146 or equivalent. Cannot be taken for credit after receiving a C or better in MATH 166. (F,Sp; SS upon student request)

#### **MATH 166 Calculus I**

4 cr.

This course provides a thorough coverage of differential calculus, including functions, limits, continuity, the derivative, rules of differentiation, the mean-value theorem, implicit differentiation, as well as applications to graphing and problems of maxima-minima and related rates. The course concludes with an introduction to integral calculus, including anti-derivatives, the definite integral, and the fundamental theorem of calculus. Prerequisite: MATH 147 or 149 or equivalent. (F, Sp; SS upon student request)

#### **MATH 167 Calculus II**

4 cr.

3 cr.

3 cr.

3 cr.

A continuation of the study of differential and integral calculus from MATH 166, including inverse functions, techniques of integration, improper integrals, and the application of the definite integral to problems of arc length and separable differential equations; topics from analysis, including polar coordinates, parametric equations, sequences, series, power series, and Taylor polynomials. Prerequisite: A grade of C- or better in MATH 166. (F, Sp)

### **MATH 205**

**Mathematical Programming** An introduction to mathematical programming as supported by computer algebra software packages such as Mathematica or Maple. Topics covered include familiarity with front end commands, basic algebraic operations, graphics, animation, data processing, recursion and pattern matching, as well as the implementation of various classical algorithms such as Newton's method and the generation of fractals. Prerequisite: MATH 166. (Sp)

#### **MATH 216**

#### **Elementary Statistical Concepts**

An introduction to the central concepts of descriptive and inferential statistics from an intuitive point of view, including the use and abuse of statistics in contemporary settings, frequency distributions, measures of central tendency and dispersion, sampling, confidence intervals and hypothesis testing, methods of presenting statistical data. Prerequisite: WPT Math Formula score of 40+, ACT Math Score 20+, or Math 30. Cannot be taken after receiving a C- or better in another statistics course. (F, Sp; SS upon student request)

#### **MATH 226**

**Fundamentals of Statistics** 

An introductory course in applied statistics, covering such topics as descriptive statistics, elementary probability, sampling and sampling distributions and hypothesis

testing. May not be taken for credit if Econ. 226 has been taken. Prerequisite: MATH 146 or equivalent. Cannot be taken after receiving a C- or better in a more advanced statistics course. (F, Sp; SS upon student request)

### **MATH 236 Discrete Mathematics**

This course provides an introduction to topics in discrete mathematics, including set theory, mathematical induction, permutations and combinations, binomial coefficients, recurrence relations, introductory logic, graph theory, and applications to computer science and probability. Prerequisite: MATH 156 or 166. (F. SP)

#### **MATH 246**

Mathematics for Elementary Teachers I Course content will include problem solving, reasoning, sets, whole numbers, numeration, decimals, functions, D geometry, and measurement. Prerequisite: WPT Math Formula score of 40+, ACT Math Score 20+, or Math 30. Open only to elementary education majors of at least sophomore standing. (F, Sp)

#### **MATH 247**

4 cr. **Mathematics for Elementary Teachers II** Course content will include the real number system, similarity and proportional reasoning, number theory, measurement, probability and data analysis. Prerequisite: A grade of C- or better in MATH 246. (F, Sp)

#### **MATH 248** 3 cr. **Elementary Mathematics Advanced** Standing

This course will extend concepts introduced in other math classes, and present new topics of importance in the current school mathematics curriculum. Topics will be chosen from the areas of modeling, problem-solving, set theory, logic, the real number system, number theory, functions and graphing, geometry, measurement, probability, and data analysis. Prerequisite: MATH 247. (Sp, odd years)

## **MATH 256**

Linear Algebra

Systems of linear equations, matrices, determinants, vector spaces, linear transformations, eigenvalues and diagonalization theorems will be covered in the course. Prerequisite: MATH 156 or 166. (F, Sp)

#### **MATH 260** Logo for Teachers

This course will provide an introduction to mathematical problem solving, via the programming language logo, giving pre-

service teachers the necessary background for teaching mathematics with the support of a problem solving language. Mathematical content and processes will be taught using logo. Standard based curriculum materials will be developed and assessed. Prerequisite: MATH 247 or consent of instructor. (F)

#### **MATH 266 Calculus III**

4 cr.

4 cr.

3 cr.

This course covers topics in multi-variable calculus, including graphing, partial differentiation, directional derivatives, gradients, definite integration over planar regions and regions of space, cylindrical and spherical coordinates, the Jacobian and methods for changing coordinates. Introductory vector analysis, including line and surface integrals are treated as time permits. Prerequisite: A grade of C- or better in MATH 167. (F,Sp; SS upon student request)

**MATH 279** 1 cr. **Cooperative Education and Internship I** A mathematics-related work experience such as tutoring, grading papers or serving as a laboratory assistant. In addition, students will be expected to attend several seminars on job skills and to assist in projects proposed by their on-site supervisor. This course is intended to help prepare students for MATH 379. Prerequisites: Completion of MATH 167; sophomore standing; GPA of 3.0 or higher; permission of MATH Department Internship Supervisor. (F, Sp)

#### **MATH 289** 0.5-3 cr. **Special Topics in Mathematics**

#### **MATH 305** 3 cr. Integrating Technology in Teaching **Secondary Mathematics**

A course for in-service elementary and middle school teachers interested in using current technologies in the mathematics classroom. Calculators, computer systems, web-based applications, and imaging technologies will be utilized to support the teaching of elementary/middle school mathematics. Impact of such technologies on the mathematics curriculum and on assessment will be studied. New curriculum materials will be developed by the class. Prerequisite: Consent of instructor. (Sp)

## **MATH 306**

Number Theory

3 cr.

3 cr.

3 cr.

Properties of integers, prime and composite numbers, Euclidean algorithm, Diophantine equations, congruences, number-theoretic functions and continued fractions will be covered. Prerequisite: MATH 236. (F, odd years)

#### MATH 311

#### **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 CSIS 311. Prerequisites: CSIS 236 (may be taken concurrently) or MATH 166. Familiarity with at least one programming language. (Upon student request)

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

#### MATH 326 Applied Statistics

This course covers the basic concepts of descriptive and inferential statistics. The inferential topics include point and interval estimation and hypothesis testing. Under hypothesis testing are the topics of: type I and type II errors, power of a test, t-test, and analysis of variance. Prerequisites: MATH 156, 166 or consent of instructor. (F; Sp odd years; SS even years)

#### MATH 327

**Applied Regress Analysis** 

This course provides an introduction to the areas of linear regression, least squares, multiple linear regression, and correlation. Applications will be developed with concern toward appropriateness of the model and its use with computer packages, particularly SPSS. Prerequisite: MATH 326 or consent of instructor. (F, even years)

#### MATH 331 Differential Equations

The fundamental theorems and methods used in studying ordinary differential equations are presented. Applications from physics and engineering are illustrated. Topics include first- and second-order linear, first-order nonlinear equations and series solutions. Prerequisite: MATH 256 or 266. (F, Sp)

#### **MATH 336**

**Combinatorics and Graph Theory** Advanced topics in combinatorics and graph theory are covered, including generating functions, partitions, inclusionexclusion formulas, Burnside's lemma, Polya's enumeration formula, graph coloring, spanning trees, network flows and algorithmic matching. Prerequisite: MATH 236. (F, even years)

#### MATH 346

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 CSIS 346. Prerequisites: MATH 167 and capability in at least one programming language. (F)

#### MATH 347 Numerical Methods 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 finitedifference methods. Co-listed as CSIS 347. Prerequisite: MATH 266 and capability in at least one programming language. (Sp, odd years)

#### MATH 351 Abstract Algebra

Students will study algebraic systems such as groups, subgroups, normal groups, rings, subrings, ideals, homomorphisms of groups and rings. Prerequisite: MATH 236 and 256. (Sp)

### MATH 356 3 cr. Probability

Fundamental concepts of discrete and continuous probability theory will be developed, including density and distribution functions, independence, conditional probability, Baye's theorem, marginal probabilities and densities, bivariate densities, moment-generating functions, and the central limit theorem. Prerequisites: MATH 236 and 266. (F)

## MATH 357

Mathematical Statistics The mathematical theory of statistics is examined, including estimation, consistency, sufficiency, method of moments, maximum likelihood, hypothesis testing, power of tests, likelihood ratio test, and common tests such as the Z, T, F and Chi-square. Prerequisite: MATH 356. (Sp)

## MATH 361

Symbolic Logic

The nature of logic, valid argument forms, truth tables, propositional functions and quantification, propositional calculus, and predicate calculus will be covered in the course. (Upon student request)

MATH 365	3 cr.
Topology	

#### MATH 366 Advanced Calculus I

Advanced treatment of real numbers, limits, sequences, continuity, differentiation and integration. Prerequisite: MATH 236 and 266. (F, odd years)

## MATH 367

3 cr.

3 cr.

#### **Advanced Calculus II**

Advanced treatment of transformations and mappings, infinite series, sequences and series of functions, vector calculus, double and triple integrals, parametric equations, line and surface integrals, and point set theory. Prerequisite: MATH 366. (Sp, even years)

## MATH 371

**Introduction to Actuarial Mathematics** This course provides an introduction to actuarial science, while assisting students in their mathematical preparation for actuarial studies. The mathematical content of the course includes topics from calculus, linear algebra, probability theory and mathematical statistics. Prerequisites: MATH 266 and 356. (Sp, odd years)

#### MATH 378

#### 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)

#### MATH 379

3-12 cr.

**Internship in Mathematics** A temporary paid job (usually lasting for one semester or summer) providing pre-professional experience in an offcampus business or institution. The job must provide practical applications of mathematics-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: MATH 236, 256, 266 and at least one 300-level math course; 60 or more credit hours with a GPA of 3.0 or better; permission of Mathematics Internship Supervisor; MATH 279 or permission of Mathematics Department Chair. (F, Sp, SS)

MATH 389	0.5-3 cr.
Special Topics in Mathematics	
MATH 406	3 cr.
<b>Complex Variables</b>	
MATH 411	3 cr.
Geometry	

#### Topics include Euclidean geometry of the polygon and circle, inversion, constructions, axiomatic foundations, non-Euclidean geometries, platonic solids, and

3 cr.

3 cr.

3 cr.

the theory of transformations. Prerequisite: MATH 167, 236 and 256. (F)

#### MATH 412 Advanced Geometry

Topics covered include quadrilateral similarity theory, geometric software, projective geometry, ideal points and lines, impossible constructions, transformations in space. Prerequisite: MATH 411. (Sp, odd years)

#### **MATH 431**

#### Advanced Differential Equations

Topics in the course include: systems of differential equations, introduction to partial differential equations, Fourier series, and stability theory. Prerequisite: MATH 331. (F, even years)

#### MATH 436

#### **History of Mathematics**

This is a writing intensive course for the mathematics education major. This course studies the evolution of mathematical concepts, symbolism, processes and structures together with the role of mathematics in human intellectual and cultural development. It stresses the unique features of mathematics as a discipline and its interrelationship to other major areas of study, all from a historical perspective. Prerequisite: two years of college mathematics. The course is intended for education students. (Sp)

## MATH 456

**Advanced Probability** 

Advanced topics in probability are examined, including the theory of Markov chains, the Poisson process, queueing theory, renewal theory and reliability theory. Prerequisite: MATH 356. (Sp, even years)

#### MATH 485 Seminar: Mathematics

This is the writing intensive course for the mathematics liberal arts major. This is a seminar in advanced topics in mathematics. Students will research a topic and give an oral presentation, along with a written report. Prerequisite: senior standing and completion of all core requirements. (F, Sp)

#### **MATH 489**

### **Special Topics in Mathematics**

A continuation of the higher-level mathematics courses or a presentation of special advanced topics in mathematics as the need and interest develops. The topics will be chosen by the instructor, generally in the area of the instructor?s specialty. Prerequisites: MATH 266, junior or senior standing and consent of the instructor. (Sp, even years)

#### MATH 490 Readings in Mather

## Readings in Mathematics

This course is intended for upper level students who wish to read intensively in a particular area of mathematics. Prerequisite: consent of instructor. (F, Sp, SS)

### **MATH 499**

3 cr.

3 cr.

2 cr.

3 cr.

1 cr.

3 cr.

**Independent Study** This course is designed for upperclassmen who wish to work independently on a topic or problem in mathematics. A paper describing the research is required. Prerequisite: consent of instructor. (F, Sp, SS)

### MARKETING

#### **MKTG 279**

**Cooperative Education and Internship** Internships provide valuable experience in the business world significantly beyond classroom experience. Eligibility requirements include full-time business major in good academic standing; approval from internship advisor, department chair, and prior completion of 60 credits including basic business tool courses and business core courses. No more than three credits can be used as business electives. Pass/fail only.(F,Sp,SS)

MKTG 289	0.5-3 cr.
Special Topics in Marketing	

#### MKTG 310 Principles of Marketing

Introductory course which studies decisions made in creating products and services to meet consumer needs in a changing business environment. Product development, pricing, logistics, promotion and characteristics of customers are studied in-depth. Prerequisites: Must be Admitted to the College of Business and Economics. This includes students admitted to the University Fall 2003. Application for admission is done throught the Dean's Office, CBE.(F,Sp)

#### MKTG 311 3 cr. Principles of Marketing for Marketing Communications

This course is open to majors in Marketing Communications. Strategic planning, organizational structure, and marketing principles are analyzed from the perspective of global relationships with emphasis on communications. This course may not be used for credit in the business major or minor. Prerequsite: Sophomore standing.(F,Sp)

#### MKTG 312

1-3 cr.

1-3 cr.

1 cr.

3 cr.

#### **Consumer Behavior**

The objectives of this course are to develop an understanding of how consumers make decisions and why this process is important for strategic marketing analysis. The course provides knowledge about the individual, social and environmental factors that influence consumer decisions. Theoretical contributions from the behavioral and social sciences will be used in developing an understanding of the importance of consumer analysis to overall marketing strategy. Prerequisite: MKTG 310 or 311.(F, Sp)

#### MKTG 315 Retail Management

Administrative and strategic planning in large and small retail firms. Management of retail functions: stock, planning, inventory control, markup and pricing, retail accounting, merchandising, retail promotion, store location, design and layout, legal and ethical issues, information systems. Prerequisite: MKTG 310 or 311.

## MKTG 325

Sales Effectiveness The objectives of this course include developing an understanding of the importance of building and maintaining relationships with an organization's clients so that both parties can meet their sales or funding goals. Prerequisite: MKTG 310 or 311. (Not offered every semester.)

#### MKTG 330 Promotional Strategy

Examination of the principles of promotional strategy within the context of the integrated marketing communications component of marketing strategy. Topics include: promotional strategy; management of the promotion mix (advertising, sales promotion, public relations); media strategy; and evaluation. Prerequisite: MKTG 310 or 311.

#### MKTG 334 Direct Marketing

Students learn strategies and techniques of direct marketing which is an interactive system of marketing using one or more media, including the internet, to effect a measurable response and/or transaction at any location. Prerequisite: MKTG 310 or MKTG 311. (Not offered every semester.)

#### MKTG 342 Services Marketing

This course focuses on the challenging task of marketing for the service firm. The differences in marketing goods and the marketing of services is stressed. Includes

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

strategy development for organizations form a wide variety of services industries. Prerequisite: MKTG 310 or 311.

3 cr.

3 cr.

3 cr.

6 cr.

2-6 cr.

#### **MKTG 352**

#### **Business to Business Marketing**

Strategies for keeping business, institutional, and government customers by understanding their needs and buying practices are analyzed. The role of global strategic alliances, adding value, and creative problem solving are emphasized. The inter-relationships between products and services are also studied. Prerequisites: MKTG 310.(F)

#### **MKTG 355 International Marketing**

This course emphasizes marketing practices in a global environment. Joint ventures, cultural differences, international trade and economic practices are investigated. Prerequisite: MKTG 310 or MKTG 311.(Sp)

#### **MKTG 365 Marketing Research**

The primary objective of this course is to develop an ability to formulate marketing research strategies to address the various kinds of marketing research questions/ problems frequently encountered in organizations. The course will include an analysis of the major techniques used in collecting, analyzing and interpreting marketing research information. Prerequisites: MKTG 310 or 311, and Econ 326 or Math 226 or Psyc 201, and be of Soph level or higher. (Sp)

#### **MKTG 378**

#### 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; junior or senior standing.(F)

### **MKTG 379**

**Internship in Marketing** 

Internships provide valuable experience in the business world significantly beyond classroom experience. Eligibility requirements include full-time business major, in good academic standing; approval from internship advisor and department chair, and prior completion of 60 credits including basic business tool courses and business core courses. No more than three credits can be used as business electives. Pass/fail only.(F, Sp, SS)

#### **MKTG 389 Special Topics in Marketing**

The study of topical issures in Marketing. Prerequisites: completion of business tool courses or permission of instructor. Some topics may have additional prerequisites.(not offered yearly)

#### **MKTG 420 Advanced Promotional Problems**

#### **MKTG 445** 3 cr. Marketing Strategy

The objective of this class is to develop students' ability to manage strategic marketing issues within the context of the fundamental business objective of maintaining a competitive advantage. Major issues covered include; environmental and competitive analysis, market segmentation and targeting, positioning decisions, strategies for new products, strategies for growth, mature, and declining markets, and international strategies. Strategy formulation and implementation will be investigated. This is a writing intensive class. Prerequisites: MGMT 300, MKTG 310 and FINC 345, ECON 326, MGMT 361, MKTG 312, MKTG 355 and senior standing.(F)

MKTG 489 Special Topics in Marketing	0.5-3 cr.
MKTG 490 Readings - Marketing	1-3 cr.
MKTG 499 Independent Study	1-3 cr.

#### MANAGEMENT

### **MNGT 150**

#### **Introduction to Business**

This course provides an overview of business from a functional perspective: management, marketing, finance, accounting, and operations. Emphasis will be placed upon understanding stakeholder interests, business ethics and environmental considerations in the decision-making process. This course may not be used for elective credit in either the business major or minor.(F)

#### **MNGT 250 Global Business and Society**

Introduces students to the values that serve as the foundation for American business organizations and the impact these values have in our global economy. Uses tools of social scientific inquiry to examine how globalization has impacted theses values and how business has responded to the challenges of globalization. (Offered once a year).

0.5-3 cr.

3 cr.

#### **MNGT 279**

#### **Cooperative Education and Internship I**

1 cr.

Internships provide valuable experience in the business world significantly beyond classroom experience. Eligibility requirements include full-time business major in good academic standing; approval from internship advisor, department chair, and prior completion of 60 credits including basic business tool courses and business core courses. No more than three credits can be used as business electives. Pass/fail only.(F, Sp, SS)

MNGT 289	0.5-3 cr.
<b>Special Topics in Management</b>	

#### **MNGT 300** 3 cr. **Management and Organizational Behavior**

This course will address basic management principles and the interrelated principles of individual and group behavior. The objective of this course is to help the student become an effective manager in today's organizations. Prerequisites: Admission to College of Business and Economics. This includes students admitted to the University Fall 2003. Application for admission is done throught the Dean's Office, CBE.(F, Sp,SS)

### **MNGT 310**

**Culture and Business** This course concerns the impact of cultural and linguistic diversity on business. Students learn how understanding issues of race, gender, and ethnicity can improve communication and as a result enrich business organizations. Prerequisite: junior standing.(not offered every term)

#### **MNGT 318 Operations Research**

3 cr.

3 cr.

3 cr.

3 cr.

This course teaches students how to become better problem solvers and decision makers by using the most common tools in Operations Research/Management Science. Topics include Linear Programming, Integer Programming, and Network Models. Emphasis is on formulating problems that may arise in business such as product mix, scheduling employees, capital budgeting, transportation, advertising, and investment. Students represent and solve the problems using the spreadsheet program Excel. Other software is introduced as needed. Prerequisites: ECON 205 or MATH 156, CSIS 215.(Sp)

#### **MNGT 320**

### **Human Resource Management**

The objective of this course is to examine the functions of human resource management. The course will focus on recruitment, selection, job analysis, compensation, labor relations, performance

appraisals and organizational change. Prerequisite: MNGT 300.(F,Sp)

MNGT 322	3 cr.
Wage and Salary Administration	

#### MNGT 330

#### Managing Workplace Diversity (d)

This is an approved University diversity course. Students will learn to improve the level of efficiency in an organization through effective diversity initiatives. Topics reviewed include: conducting a diversity audit; creating an organizational climate that embraces diversity for maximized workplace potential; building cohesive multicultural work teams; and hiring, training and promoting a diverse work force.(not offered every term.)

#### MNGT 340 Ethical Leadership

This course explores theories of leadership and the ethical challenges faced by leaders. Assessment of leadership competencies and practice in utilizing them through case studies, exercises and reflection will enhance the leadership abilities of students. An integral part of this course involves examining and building one's own ethical competency through self-assessment challenge and feedback and learning to recognize ethical dilemmas and deciding how to resolve them. Prerequisite: MNGT 300.(F,Sp)

#### MNGT 350 Decision Making

This course takes a different approach to decision making than is taken in courses in the various functional areas of management. The focus in this course is on how decisions are made as opposed to how they should be made. Topics include the heuristics (rules-of-thumb) that humans employ in decision making, the biases caused by these rules-of-thumb and the concept of group think (a hazard to effective decision making in groups). Prerequisite: MNGT 300.(F)

#### MNGT 355 International Business (g)

The course covers international activities of small and medium-sized firms as well as large multinational corporations. Topics include trade strategies, doing business with newly emerging market economies, the policy aspects of international business, reflecting the U.S. government and international institutions and functional areas of international business management. Prerequisite: MNGT 300.(F)

#### MNGT 361 Operations Management

The operations function in any enterprise (public or private, profit or non-profit) is responsible for all the activities related to producing goods or delivering services. The course considers the quantitative and qualitative aspects of decisions that must be made to control the operations function in both services and manufacturing. Prerequisites: Admission to College of Business and Economics. This includes students admitted to the University Fall 2003. Application for admission is done throught the Dean's Office, CBE.(F,Sp)

3 cr.

3 cr.

3 cr.

6 cr.

2-6 cr.

3 cr.

#### MNGT 362 Logistical Management

MNGT 365

3 cr.

3 cr.

3 cr.

3 cr.

#### **Business Process Management (BPM)** This course emphasizes the process view of organizations which complements the traditional functional view. The course focuses on understanding, modeling and management of business processes. The course introduces techniques and tools for business process analysis and improvement, and addresses how technology can be used for supporting and executing business processes. Prerequisites: Admission to College of Business and Economics. This includes students admitted to the University Fall 2003. Application for admission is done throught the Dean's Office, CBE. (Sp)

### MNGT 370 3 cr. International Seminar

### MNGT 378

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. Prerequisites: participation in the Spring Semester Abroad orientation seminar; junior or senior standing.(F)

### MNGT 379

### Internship in Management

Internships provide valuable experience in the business world significantly beyond classroom experience. Eligibility requirements include full-time business major, in good academic standing; approval from Internship advisor and department chair, and prior completion of 60 credits including basic business tool courses and business core courses. No more than three credits can be used as business electives. Pass/fail only.(F,Sp,SS)

#### **MNGT 380**

**International Business Seminar** This course is a capstone for the study of international business. Students will review many topics in international business, write papers and make presentations. Prerequisite: completion of MNGT 300, MKTG 310, FINC 345 and at least one of FINC 342, MNGT 355 or MKTG 355.(Sp)

MNGT 389	0.5-3 cr.
Special Topics in Management	

MNGT 415	2 cr.
Business for Artists	

#### MNGT 430 3 cr. Small Business Management

This course is designed to analyze and introduce the student to many of the aspects of starting his/her own business or being involved with a small company. The course will address a wide array of practical issues from what business to start to where it should be located. The methodology of this course will be to utilize case studies and guest speakers. Prerequisites: FINC 345, MKTG 310 and MNGT 300.(F)

### MNGT 450 3 cr. e-Commerce

The combination of the computer and the internet has created an incredible marketspace. This course will examine the foundation, operation and implications of the internet economy. Topics include internet technologies, online market mechanisms, interactive customers, knowledge-based products, smart physical products and services, pricing in the internet economy, online auctions and emarketplaces, digital governance, policies of the internet economy and an outlook for the new economy. Prerequisites: CSIS 215, MNGT 300, MKTG 310.(Sp)

MNGT 480 3 cr. Human Resource Management Seminar This course expands the study of human resource issue and is designed for upper class students who have a significant interest in this area. The course will address relevant topics and practical issues in-depth which are facing managers today. The

methodology of this course will include current topic readings, class discussions and applied projects. Prerequisite: MNGT 320.(F, Sp)

## MNGT 485

3 cr.

Strategic Management

Writing intensive. Using case analysis, discussion, and computer programs, students will learn to integrate knowledge from the required business courses. Prerequisites: FINC 345, MNGT 300, MKTG 310, and MNGT 361. (F, Sp)

192

MNGT 489	0.5-3 cr.
Special Topics in Management	

MNGT 490	1-3 cr.
<b>Readings - Management</b>	

#### **MNGT 499** 1-3 cr. **Independent Study**

Independent study is an opportunity for upper class students to select a project in an area of business and work independently with an assigned professor. Open only to business administration majors. Prerequisites: a 3.0 GPA in accounting and business courses, upper class standing and consent of department chair.(F, Sp, SS)

#### MODERN LANGUAGE

MODL 121	6-12 cr.
Taiwan Exchange Program	Chinese

MODL 122	6-12 cr.
Taiwan Exchange Program	Chinese

MODL 279	1 cr.
<b>Cooperative Education and I</b>	Internship I

#### **MODL 289** 0.5-3 cr. **Topics in Modern Language**

This course provides the opportunity to study a selected topic in Modern Language. Prerequisite: sophomore standing. (upon student request)

#### **MODL 376**

Mexico: Cultural Experience (g)

This course has three components: a Mexican study seminar during the fall semester preceding the Mexican experience; a three-week period of group travel which explores major archeological, historical and cultural sites in Mexico; a paper dealing with the Mexican people and their immigrant experience in the U.S.A. Spanish language not required. Prerequisites: junior or senior standing; minimum 2.5 GPA.(J-term)

#### **MODL 377**

**Foreign Study** 

This program allows a student to take advantage of cooperative agreements between UWRF and institutions of higher education in other parts of the world. The student will enroll in language or other courses at institutions with which UWRF has cooperative agreements, such as Universidad Autnoma in Guadalajara, Mexico. Students will receive credit based on range of course work and evidence of success at the cooperating institution. Admission to appropriate international program required.(F, Sp, SS)

**MODL 378** Semester Abroad Research

## **MODL 379**

Internship in Modern Language A short-term work experience with a private business or government organization. The student learns to perform the tasks of a regular employee, applying classroom knowledge to practical job situations. The student learns about career opportunities open to Modern Language majors. Prerequisites: Junior standing; FREN, GERM or SPAN 302; consent of department chair and internship supervisor.(F, Sp)

**MODL 389** 0.5-3 cr. **Special Topics in Modern Language** 

**MODL 489** 0.5-3 cr. **Special Topics in Modern Language** 

MODL 499	1-4 cr.
Independent Study	
	1

Students will conduct independent study in languages other than Chinese, French, Spanish or German. Prerequisite: consent of department chair.(F,SP)

### **MUSIC**

3 cr.

3-12 cr.

#### **MUS 100** 3 cr. **Understanding Music**

Concepts of musical understanding are examined. Emphasis is on listening to music of all historical periods and of various stylistic genres. (not open to music majors or minors)(F, Sp)

### **MUS 102**

**Class Guitar** Fundamentals of guitar techniques are taught with a balance of folk and classical methods.(F, Sp)

### **MUS 103**

### **Class Voice**

This course is for students with little or no previous training, and is designed to develop a healthy singing technique through exercises and solo performances. Other objectives include improved musicianship and enhanced tone production.(F, Sp)

#### **MUS 104 Beginning Piano for Non-Majors**

This course provides basic instruction in playing the piano with emphasis on sight-reading and harmonization of simple melodies. Open to all students with little or no previous training.(F, Sp)

#### **MUS 130** 3-6 cr.

2-3 cr.

#### **Music Theory and Ear Training I**

Basic music theoretical concepts are covered including: fundamentals analysis, 4 voice writing and analysis, melodic analysis, development of aural acuity through melodic, harmonic and rhythmic dictation and sight singing.(F)

#### **MUS 131**

4 cr.

1 cr.

3 cr.

3 cr.

4 cr.

**Music Theory and Ear Training II** A continuation of Music 130. Basic music theoretical concepts including: fundamentals, harmonic and melodic analysis, 4 voice writing, development of aural acuity through melodic, harmonic and rhythmic dictation and sight singing. Prerequisite: MUS 130.(Sp)

#### **MUS 135** 2 cr. **Instrument Fundamentals**

#### **MUS 140** 1 cr. **Class Piano for Music Majors and** Minors

This course is for music majors and minors with little or no previous training. Emphasis is upon preparation for the Piano Proficiency exam. May be repeated.(F,Sp)

#### **MUS 141 String Techniques**

Basic instruction on stringed instruments for music education majors is included.(F,alternate years)

## **MUS 170**

#### **Recording Techniques**

This course provides an overview and hands-on application of basic sound reinforcement and recording techniques and practices, digital audio editing and manipulation, and conversion of digital audio on to compact disc media. Materials fee is required. (Sp)

### **MUS 200**

#### American Music

The history of music in the United States is examined along with an analysis of contemporary musical styles and selected compositions; contributions of ethnic minorities with special emphasis upon the evolution of African-American styles and the role of music in contemporary life will be examined. (F)

#### **MUS 204 Inter Class Piano**

Students will gain instruction in harmonization skills of melodies; reading of basic piano literature; and continued introduction of music fundamentals. Prerequisite: MUS 104 or consent of instructor.(SP)

1 cr.

1 cr.

1 cr.

### MUS 225

#### Voice for the Actor

This laboratory course provides opportunity for students to explore their voice as singers of musical theatre literature. Students will develop skills in vocal characterization and independence of the vocal mechanism during stage movement. Students taking SCTA 225 must take this course concurrently.(Sp, alternate years)

#### MUS 230

Music Theory and Ear Training III

Continuation of MUS131; includes studies in larger dominant and non-dominant structures, chromatically altered chords, and analysis of more complex homophonic and polyphonic forms. Prerequisites: MUS 131.(F)

#### MUS 231

Music Theory and Ear Training IV

Continuation of Music 230. Analysis of more complex homophonic and polyphonic forms through 20th century styles and techniques. Prerequisite: MUS 230.(Sp)

#### MUS 234

Music History and Literature I

This is a writing intensive course. The development of the western musical style from antiquity through 1750 will be examined. Both secular and sacred music will be discussed through works of the major composers of this period.(F)

#### MUS 235

Music History and Literature II

This is a writing intensive course. The development of the western musical style from 1750 to the early 20th century will be examined. Both secular and sacred music will be discussed through works of the major composers of this period.(Sp)

#### **MUS 240**

#### **Piano Proficiency**

Basic proficiency in piano playing required of all music majors prior to student teaching. An examination, conducted at the end of the term, includes playing scales, chord patterns, prepared accompaniments and sight reading. Prerequisite: MUS 140, 125, or permission of instructor.(F, Sp, SS)

#### MUS 241

#### Woodwind Techniques I

The fundamentals of playing and teaching the flute, oboe, and bassoon based on class instruction will be covered.(F, alternate years)

## MUS 242

Woodwind Techniques II

The fundamentals of playing and teaching the clarinet and saxophone based on class

instruction will be covered.(Sp,alternate years)

#### MUS 243 Brass Techniques I

1 cr.

4 cr.

4 cr.

4 cr.

4 cr.

1 cr.

1 cr.

1 cr.

The fundamentals of playing and teaching the various high-brass instruments based on class instruction will be covered.(F,alternate years)

#### MUS 244 Brass Techniques II

The fundamentals of playing and teaching the various low-brass instruments based on class instruction will be covered.(Sp, alternate years)

#### MUS 245 Percussion Techniques I

The fundamentals of playing and teaching the various percussion instruments based on class instruction will be covered.(F, alternate years)

## MUS 246

**Percussion Techniques II** This course is a continuation of Percussion Techniques I. Application of the various techniques learned in Music 245 to percussion ensemble literature will be emphasized.(Sp,alternate years)

#### MUS 247 Diction: IPA and Italian

This course is designed to introduce singers to the alphabet of the International Phonetic Association and teach the principles of English, Italian and Latin diction.(F)

#### MUS 248

**Diction II: German and French** This course is designed to teach singers the principles of German and French diction. Prerequisite: MUS 247(Sp)

#### MUS 250 Jazz Improvisation I

A fundamental study of jazz improvisation emphasizing the elements of jazz theory and their application to improvising on modal tunes, blues, and simple jazz standards. This course includes performance of jazz and jazz-related styles, including swing, ballad, bossa nova, funk, rock, blues, and other popular styles. Prerequisite: MUS 131 or consent of instructor.(F, alternate years)

#### MUS 251 Jazz Improvisation II

A continuing study of more advanced melodic, harmonic, and rhythmic concepts and their application to jazz improvisation. Emphasis is given to advanced chordscale relationships, chord substitution, and complex harmonic progressions. Prerequisite: MUS 250.(Sp,alternate years)

#### MUS 255 History of Jazz

1 cr.

The study of the history and development of jazz styles in America will be covered. This course will focus on the contributions of African-Americans as leading jazz artists. Also covered are the origins, development, and innovations in jazz styles as a form of artistic expression unique to America.(Sp)

MUS 289 0.5-3 cr. Special Topics in Music

#### MUS 300 World Music (g)

The study of music in world cultures as a form of artistic expression and symbol of historical as well as national identity, recognizing the interrelationships between music and society in terms of function, context, and structure through both the insider's view and the comparative outsider's view.(Sp)

### MUS 301 1 cr. Composition

This course is an introduction to the composition of music in various styles and media. Students will begin by composing single voice melodies and will then proceed with two, three and four voice writing. May be repeated.(F,Sp)

#### MUS 310 The Arts of Edinburgh

#### MUS 330 Orchestration

A survey and brief study of orchestration and orchestral instruments followed by orchestration projects for each major instrumental classification. Finally, each student will orchestrate a work for full orchestra or band. Prerequisite: MUS 231.(Sp, alternate years)

#### MUS 331

**Choral Composition and Arranging** Scoring and arranging for two, three and four part choirs. Prerequisite: MUS 231.(Sp, alternate years)

#### MUS 332 3 cr. Keyboard Literature

#### MUS 333 20th Century Music

Influences on and directions of recent 20th century composers will be examined with emphasis on styles and works. Prerequisite: MUS 235.(F)

MUS 334	2 cr.
Piano Tuning	

3 cr.

3 cr.

3 cr.

3 cr.

#### MUS 340

### **Opera Techniques**

Designed to acquaint the student with the technical problems involved in the direction and production of musical drama, this course offers practical experience through public performance of chamber operas and musicals with class members spending a required number of hours as production personnel.(F, alternate years)

### MUS 341

#### Vocal and Choral Pedagogy

This class is an investigation of teaching procedures as they apply to the development of solo and choral singers in secondary school systems. Prerequisites: MUS 105, 108, 109, 110 or 127.(F)

#### MUS 342

#### Conducting

The fundamental concepts of baton technique, score preparation, and rehearsal techniques will be taught along with a continuation of ear training and aural skills. Prerequisite: MUS 131, 235.(F)

#### MUS 343

#### Instrumental Conducting

Continuing concepts and skills of conducting will be examined. Emphasis is on orchestral and band (instrumental) conducting. Prerequisite: MUS 342.(Sp)

#### MUS 344

#### **Choral Conducting**

Students will study technical and musical concepts involved in the art of choral conducting. Prerequisites: MUS 341, 342.(Sp)

MUS 347 Woodwind Repair

MUS 349 Saxaphone Workshop

### MUS 350

### Music for Elementary Teachers

Materials and techniques for teaching music in elementary schools will be explored. Areas studied are: 1) the child voicerote song teaching and the out-of-tune singers; 2) the elements of musicrhythmic experiences will be emphasized; 3) music reading and part singing; 4) music from various cultures; and 5) materials and methods of aiding and evaluating the understanding of music. Required of majors in Elementary Education. Prerequisite: Junior or senior standing.(F,Sp, SS)

#### MUS 351 Music Education I

Students will examine appropriate materials, techniques and evaluation procedures used in teaching and/or

supervision in general elementary, junior high, and senior high music programs. Prerequisites: MUS 231, successful completion of the pre-music education evaluation.(F)

#### MUS 352 Music Education II

3 cr.

3 cr.

2 cr.

2 cr.

2 cr.

2 cr.

2 cr.

3 cr.

This course provides an introduction to the profession of music education as well as aesthetics and theories of learning as applied to public school music teaching. Recent history of the profession and its place in American education is covered. Topics include methods and materials for secondary vocal and instrumental music curricula, evaluative procedures, and prestudent teaching experiences in the public schools. Prerequisite: MUS 351 (Sp)

### MUS 357 2 cr. Brass Repair

#### **MUS 366**

**Music and Computer Applications** 

Exploration of musical composition notation, including score layout, and sequencing. Development of individual projects such as a musical arrangement or composition, a sequenced composition for performance through a MIDI-attached keyboard, or a set of transposed parts for an instrumental or vocal ensemble. Basic familiarity with computers is desirable.(SS)

#### MUS 378 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)

#### MUS 379 2 cr. Internship in Music

The internship serves as a practical work experience in a music-related business or service agency. Prerequisite: consent of department chair and dean, College of Arts and Sciences, required at least six weeks prior to assignment.(F, Sp, SS)

#### MUS 389 Special Topics in Music

An in-depth study of selected issues in music. Sample topics include: conducting, comprehensive musicianship through performance, arts propel, multi-cultural music, working with marching band, music and movement, etc. The course may be repeated for credit when a different topc is covered, but only two hours may count toward the major. Prerequisites: consent of the instructor.(F, Sp, SS)

#### MUS 401

#### Advanced Composition

Students will compose music in various styles and media. May be repeated. Prerequisite: MUS 301.(F, Sp)

#### MUS 430 3 cr. Analysis New Music

#### MUS 431 Instrumental Literature

An in depth study of instrumental literature from both a historical and analytical view. This course will provide an overview of instrumental literature in addition to practical skills in analysis to aid the learner in selecting appropriate literature for a variety of instrumental settings. Prerequisite: MUS 231 or permission of instructor.(F, alternate years)

#### MUS 433 Choral Literature

3 cr.

An in depth study of choral literature from both a historical and analytical view. This course will provide an overview of choral literature in addition to practical skills in analysis to aid the learner in selecting appropriate literature for a variety of choral settings. Prerequisite: MUS 231 or permission of instructor.(Sp, alternate years)

#### MUS 434 1-3 cr. Solo Literature: Instrumental, Piano and Vocal

A survey of solo instrumental (weeks 5), keyboard (weeks 6-10) and vocal literature (weeks 115) and methods as pertains to the educational and performing experience. This course is divided into three sections and may be taken for one, two or three credits. Prerequisite: MUS 235 (Sp, alternate years)

#### MUS 440 Piano Pedagogy

Problems and procedures in piano teaching, starting with the earliest beginner, will be examined. Various methods and materials (including the Suzuki) for individual and class instruction will be studied. Prerequisite: MUS 125 or 325.(F, alternate years)

MUS 489 Special Topics in Music	0.5-3 cr.
MUS 490 Independent Study	1-3 cr.
MUS 491 Senior Recital	1 cr.
Presentation of a program of re	presentative

work in the major applied field. Prerequisite: Permission of applied instructor.(F, Sp)

3 cr.

## 1 cr.

3 cr.

3 cr.

3-12 cr.

0.5-3 cr.

#### MUS 499 Independent Study

1-2 cr.

1-2 cr.

This is an opportunity to pursue a musical topic or project in depth. Student must submit an outline proposal to a faculty advisor and the department chair before registration for the course is approved. Project should result in a term paper, a musical score, or a similar tangible product.(F, Sp, SS)

### MUSIC APPLIED

#### MUSA 120 Brass

This course provides private instruction in one of the following: voice, keyboard instruments, or orchestral and band instruments. It is assumed that students who wish to apply credit toward a major or minor in music will have had previous training and that the materials studied will be of collegiate level. All students must demonstrate basic performance competence through an audition for the instructor. Private instruction is given to qualified music majors and minors to fulfill specific degree requirements. All Education and Broad Area Music Majors must take one applied area for 2 credits per semester. Liberal Arts Music Majors, Music Minors, and non-majors/minors may only take applied for 1 credit. If there is room in the instructor's schedule, non-music majors and minors may take applied lessons but must register for applied sections 6, 7, or 8 and pay a course fee of \$150 per credit. Prerequisite: consent of instructor and previous training.(F, Sp)

#### MUSA 121 Guitar

This course provides private instruction in one of the following: voice, keyboard instruments, or orchestral and band instruments. It is assumed that students who wish to apply credit toward a major or minor in music will have had previous training and that the materials studied will be of collegiate level. All students must demonstrate basic performance competence through an audition for the instructor. Private instruction is given to qualified music majors and minors to fulfill specific degree requirements. All Education and Broad Area Music Majors must take one applied area for 2 credits per semester. Liberal Arts Music Majors, Music Minors, and non-majors/minors may only take applied for 1 credit. If there is room in the instructor's schedule, non-music majors and minors may take applied lessons but must register for applied sections 6, 7, or 8 and pay a course fee of \$150 per credit. Prerequisite: consent of instructor and

#### MUSA 122 Harpsichord

This course provides private instruction in one of the following: voice, keyboard instruments, or orchestral and band instruments. It is assumed that students who wish to apply credit toward a major or minor in music will have had previous training and that the materials studied will be of collegiate level. All students must demonstrate basic performance competence through an audition for the instructor. Private instruction is given to qualified music majors and minors to fulfill specific degree requirements. All Education and Broad Area Music Majors must take one applied area for 2 credits per semester. Liberal Arts Music Majors, Music Minors, and non-majors/minors may only take applied for 1 credit. If there is room in the instructor's schedule, non-music majors and minors may take applied lessons but must register for applied sections 6, 7, or 8 and pay a course fee of \$150 per credit. Prerequisite: consent of instructor and previous training.(F, Sp)

#### MUSA 123 Organ

This course provides private instruction in one of the following: voice, keyboard instruments, or orchestral and band instruments. It is assumed that students who wish to apply credit toward a major or minor in music will have had previous training and that the materials studied will be of collegiate level. All students must demonstrate basic performance competence through an audition for the instructor. Private instruction is given to qualified music majors and minors to fulfill specific degree requirements. All Education and Broad Area Music Majors must take one applied area for 2 credits per semester. Liberal Arts Music Majors, Music Minors, and non-majors/minors may only take applied for 1 credit. If there is room in the instructor's schedule, non-music majors and minors may take applied lessons but must register for applied sections 6, 7, or 8 and pay a course fee of \$150 per credit. Prerequisite: consent of instructor and previous training. (F, Sp)

#### MUSA 124 Percussion

This course provides private instruction in one of the following: voice, keyboard instruments, or orchestral and band instruments. It is assumed that students who wish to apply credit toward a major or minor in music will have had previous training and that the materials studied will be of collegiate level. All students must demonstrate basic performance competence through an audition for the instructor. Private instruction is given to qualified music majors and minors to fulfill specific degree requirements. All Education and Broad Area Music Majors must take one applied area for 2 credits per semester. Liberal Arts Music Majors, Music Minors, and non-majors/minors may only take applied for 1 credit. If there is room in the instructor's schedule, non-music majors and minors may take applied lessons but must register for applied sections 6, 7, or 8 and pay a course fee of \$150 per credit. Prerequisite: consent of instructor and previous training.(F, Sp)

1-2 cr.

1-2 cr.

#### MUSA 125

Piano

1-2 cr.

1-2 cr.

1-2 cr.

This course provides private instruction in one of the following: voice, keyboard instruments, or orchestral and band instruments. It is assumed that students who wish to apply credit toward a major or minor in music will have had previous training and that the materials studied will be of collegiate level. All students must demonstrate basic performance competence through an audition for the instructor. Private instruction is given to qualified music majors and minors to fulfill specific degree requirements. All Education and Broad Area Music Majors must take one applied area for 2 credits per semester. Liberal Arts Music Majors, Music Minors, and non-majors/minors may only take applied for 1 credit. If there is room in the instructor's schedule, non-music majors and minors may take applied lessons but must register for applied sections 6, 7, or 8 and pay a course fee of \$150 per credit. Prerequisite: consent of instructor and previous training.(F,Sp)

#### MUSA 126 Strings

This course provides private instruction in one of the following: voice, keyboard instruments, or orchestral and band instruments. It is assumed that students who wish to apply credit toward a major or minor in music will have had previous training and that the materials studied will be of collegiate level. All students must demonstrate basic performance competence through an audition for the instructor. Private instruction is given to qualified music majors and minors to fulfill specific degree requirements. All Education and Broad Area Music Majors must take one applied area for 2 credits per semester. Liberal Arts Music Majors, Music Minors, and non-majors/minors may only take applied for 1 credit. If there is room in the instructor's schedule, non-music majors and minors may take applied lessons but must register for applied sections 6, 7, or 8 and pay a course fee of \$150 per credit. Prerequisite: consent of instructor and previous training.(F, Sp)

PPLIED

previous training.(F, Sp)

#### MUSA 127 Voice

This course provides private instruction in one of the following: voice, keyboard instruments, or orchestral and band instruments. It is assumed that students who wish to apply credit toward a major or minor in music will have had previous training and that the materials studied will be of collegiate level. All students must demonstrate basic performance competence through an audition for the instructor. Private instruction is given to qualified music majors and minors to fulfill specific degree requirements. All Education and Broad Area Music Majors must take one applied area for 2 credits per semester. Liberal Arts Music Majors, Music Minors, and non-majors/minors may only take applied for 1 credit. If there is room in the instructor's schedule, non-music majors and minors may take applied lessons but must register for applied sections 6, 7, or 8 and pay a course fee of \$150 per credit. Prerequisite: consent of instructor and previous training.(F,Sp)

1-2 cr.

#### MUSA 128 Woodwinds

This course provides private instruction in one of the following: voice, keyboard instruments, or orchestral and band instruments. It is assumed that students who wish to apply credit toward a major or minor in music will have had previous training and that the materials studied will be of collegiate level. All students must demonstrate basic performance competence through an audition for the instructor. Private instruction is given to qualified music majors and minors to fulfill specific degree requirements. All Education and Broad Area Music Majors must take one applied area for 2 credits per semester. Liberal Arts Music Majors, Music Minors, and non-majors/minors may only take applied for 1 credit. If there is room in the instructor's schedule, non-music majors and minors may take applied lessons but must register for applied sections 6, 7, or 8 and pay a course fee of \$150 per credit. Prerequisite: consent of instructor and previous training.(F,Sp)

#### MUSA 320 Brass

This course provides advanced private instruction in one of the following: voice, keyboard instruments, orchestral or band instruments. Prerequisite: Open only to music majors or minors who have completed four credits of 100-level applied music and have successfully passed a special juried audition.(F, Sp)

#### 1-2 cr. MUSA 321 Guitar

This course provides advanced private instruction in one of the following: voice, keyboard instruments, orchestral or band instruments. Prerequisite: Open only to music majors or minors who have completed four credits of 100-level applied music and have successfully passed a special juried audition.(F,Sp)

#### MUSA 322 1-2 cr. Harpsichord

This course provides advanced private instruction in one of the following: voice, keyboard instruments, orchestral or band instruments. Prerequisite: Open only to music majors or minors who have completed four credits of 100-level applied music and have successfully passed a special juried audition.(F,Sp)

#### MUSA 323 Organ

This course provides advanced private instruction in one of the following: voice, keyboard instruments, orchestral or band instruments. Prerequisite: Open only to music majors or minors who have completed four credits of 100-level applied music and have successfully passed a special juried audition.(F,Sp)

#### MUSA 324 1-2 cr. Percussion

This course provides advanced private instruction in one of the following: voice, keyboard instruments, orchestral or band instruments. Prerequisite: Open only to music majors or minors who have completed four credits of 100-level applied music and have successfully passed a special juried audition.(F,Sp)

#### MUSA 325 Piano

This course provides advanced private instruction in one of the following: voice, keyboard instruments, orchestral or band instruments. Prerequisite: Open only to music majors or minors who have completed four credits of 100-level applied music and have successfully passed a special juried audition.(F,Sp)

#### MUSA 326 Strings

1-2 cr.

This course provides advanced private instruction in one of the following: voice, keyboard instruments, orchestral or band instruments. Prerequisite: Open only to music majors or minors who have completed four credits of 100-level applied music and have successfully passed a special juried audition.(F,Sp)

#### 1-2 cr. MUSA 327 Voice

This course provides advanced private instruction in one of the following: voice, keyboard instruments, orchestral or band instruments. Prerequisite: Open only to music majors or minors who have completed four credits of 100-level applied music and have successfully passed a special juried audition.(F,Sp)

#### MUSA 328 Woodwinds

This course provides advanced private instruction in one of the following: voice, keyboard instruments, orchestral or band instruments. Prerequisite: Open only to music majors or minors who have completed four credits of 100-level applied music and have successfully passed a special juried audition.(F,Sp)

### MUSIC ENSEMBLES

#### MUSE 105 Men's Chorus

1-2 cr.

1-2 cr.

1-2 cr.

1 cr.

1 cr.

Men's Chorus is an ensemble open to all male singers. This ensemble will perform a variety of music arranged specifically for the male voice and work to develop proper skills needed for ensemble singing.(F, SP)

#### **MUSE 106**

#### **Chamber String Ensemble**

Chamber string ensembles of 2 to 15 players, open to all students and instruments by audition and/or recommendation of instructor.(offered periodically)

#### MUSE 107 Concert/Pep Band

The ensemble studies and performs both concert and pep band repertoire. Open to all students.(F, Sp)

#### MUSE 108 Concert Choir

1 cr.

1 cr.

1 cr.

Students will rehearse and perform a cappella and accompanied choral literature. Yearly concert tour. Open to all students with membership gained by audition.(F, Sp)

#### **MUSE 109**

University Chorus

UW-RF University Chorus is a nonauditioned ensemble open to the university and the community, which can be taken for credit or audit. This ensemble will work on the rudiments of music and perform a variety of choral literature that will feature several styles of singing.(F,Sp)

1-2 cr.

#### **MUSE 110**

#### Women's Chorus

This is a chorus devoted to the singing of all types of choral literature. The course is open to all women. No audition required.(F, Sp)

#### **MUSE 111**

SCV Community Orchestra

Players will perform orchestral literature of all periods. Open to all string players and a limited number of wind, brass, and percussion players. Prerequisite: audition and recommendation of the director.(F.Sp)

#### **MUSE 112**

**Brass Ensemble** 

Students will study and perform brass ensemble literature of all periods requiring specialized instrumentation.(F,Sp)

**MUSE 113** 

### Symphonic Band/Wind Ensemble

Students will rehearse and perform a wide variety of instrumental literature. The ensemble is open to all University students that qualify through the audition process. Yearly concert tour.(F,Sp)

**Percussion Ensemble** 

This course consists of mixed ensembles of definite and indefinite pitched instruments. Prerequisite: open to all students by permission of the director.(F,Sp)

#### **MUSE 115**

#### **Piano Ensemble**

Students will study music for piano duet or two pianos culminating in a public performance. Prerequisite: open to all students upon recommendation of the instructor.(Sp)

### **MUSE 116**

Woodwind Ensemble

Students will study and perform literature for woodwind instrument chamber ensembles. Open to all students of flute, oboe, clarinet, bassoon, and saxophone, based upon recommendation of the director.(F,Sp)

### **MUSE 117**

New Music Ensemble

Students will study and perform new music. Prerequisite: open to all students upon recommendation of the director.(F,Sp)

#### **MUSE 118** Jazz Ensemble

Students will study and perform jazz and jazz-related styles including swing, ballad, bossa nova, funk, rock, blues, and other popular styles. Students will blend ensemble experience with improvisation

and experimentation of unusual and progressive musical idioms. Open to all students, based upon recommendation of the director.(F,Sp)

### **MUSE 119 Guitar Ensembles**

1 cr.

This course will include the practice and performance of music for two or more guitars. Students will also learn to write transcriptions for the ensemble. Prerequisite: Audition and recommendation of the director.(F,Sp)

### **MUSE 129**

#### **Chamber Singers**

Rehearse and perform music suitable to a chamber-size (116 voices) vocal ensemble. On and off campus performance opportunities will be provided. Open to all students with membership gained by audition.(F,Sp)

#### **MUSE 160** 1 cr. **University Community Chorus**

This is a choral ensemble open to all students and community singers. It is a mixed choir devoted to singing all types of choral literature.(SS)

#### **MUSE 161**

#### **University Community Band**

This ensemble is open to any student or community musician who enjoys playing in a concert band. No audition is required; a wide variety of band literature is performed. The course is especially geared toward the adult musician who would like to continue his/her playing experience in a relaxed and productive musical environment.(SS)

#### **MUSE 167 The Palace Musicians**

### PHYSICAL EDUCATION (GEN **ED HW COURSES**)

## P E 101

Tumbling

#### Beginning and intermediate tumbling skills will be taught with an emphasis on individual skill development.(not offered on a yearly basis)

**PE 102 In-Line Skating** 

An activity course for individuals interested in developing skills necessary to participate in in-line skating as a lifetime, aerobic activity. Students will be required to bring their own in-line skates, safety equipment (helmet, elbow pads, hand protection, and knee pads), and appropriate work-out clothing. Students must also show proof of health insurance or sign a waiver. (Sp)

### P E 103

1 cr.

1 cr.

1 cr.

1 cr.

0.5-0.5 cr.

0.5-0.5 cr.

#### 0.5-0.5 cr. Jogging and Running for Beginners

This course is designed for beginning runners/joggers. Emphasis is placed on proper running mechanics, increasing cardio-respiratory endurance, injury preventions, and preparing for a 5k race at the course's conclusion. You will learn of running routes in River Falls and create your own personal running/training program for future use.

#### **PE 104** 0.5-0.5 cr. Walking for Health and Fitness

0.5-0.5 cr. **PE 110** Movement for the Body and Mind

An introductory movement class which will include a variety of stretching techniques in order to increase flexibility, relaxation exercises to aid in stress reduction, conditioning methods which can keep the body healthy and prevent injury, and basic movement vocabulary to enhance body awareness and motor efficiency. (F, Sp)

P E 111	0.5-0.5 cr.
Archery	

#### **PE 112** 0.5-0.5 cr. Swimming I

Development of basic skills in swimming, including stroke work, survival techniques and safety skills. Designed for the beginning swimmer. (F)

P E 113	0.5-0.5 cr.
Swimming II	

**PE114** 0.5-0.5 cr. Bowling An activity course that will teach fundamentals, rules, and etiquette in

bowling. Special course fee.(F,SP)

**PE 115** 0.5-0.5 cr. Handball

#### PE 116 0.5-0.5 cr. **Racquetball and Weight Training**

An activity class combining the basic skills of racquetball and weight training. The racquetball portion provides an opportunity to learn basic skills, techniques and strategies of the game. The weight training portion of the class provides an opportunity for the student to learn proper lifting techniques.(F,Sp)

P E 117 Fencing	0.5-0.5 cr.
P E 118	0.5-0.5 cr.

P E 118 Scuba

Development of basic skills and safety procedures in SCUBA. Prerequisites: Ability to swim 400 yards, one length of the pool under water and tread water for three minutes. Special course fee.(F,Sp)

P E 119	0.5-0.5 cr.
Fishing Rod Building	
P E 120	0.5-0.5 cr.
Hunting	
P E 121	0.5-0.5 cr.

#### Cross Country Skiing

The emphasis in this course is toward the development of skill and endurance in cross country skiing. Students must provide their own equipment.(not offered on a yearly basis)

P E 122	0.5-0.5 cr.
Canoeing and SM CRAFTS	

#### P E 123 0.5-0.5 cr. Wrestling Introduction to the basic skills of

wrestling.(not offered on a yearly basis)

P E 124	0.5-0.5 cr.
Tennis	

An opportunity to learn fundamental skills, rules and strategies of tennis. Students will be actively involved in both singles and doubles play.(F,Sp)

P E 125	0.5-0.5 cr.
Golf	

Group instruction in the basic skills of golf including basic swing using woods, irons and putter. Golf etiquette, rules and strategy will be included.(F,Sp)

#### P E 126 0.5-0.5 cr. Fitness and Weight Control

A course involving the creation and implementation of an individualized fitness plan. Emphasis will be placed on combining cardiovascular exercise with proper strength training techniques.(F,Sp)

#### P E 127 0.5-0.5 cr. Comprehensive Bicycling

#### P E 128

**Fundamentals of Ice Skating** Introduction to the fundamentals of ice skating. Students will learn the proper techniques involved in skating and will gain an appreciation for skating as a lifetime fitness activity.(F,Sp)

P E 129	0.5-0.5 cr.
Synchronized Swimming	

#### P E 130 0.5-0.5 cr. Racquetball

A course that will teach the rules, techniques, fundamental skills and strategies of the game of racquetball. Students must provide their own equipment including racquet and safety glasses.(F,Sp)

P E 131 Weight Training	0.5-0.5 cr.
Instruction in the funda weight training.(F,Sp)	amental skills of
P E 133	0.5-0.5 cr.
Aikido: Self-Defense	and Movement

Training

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P E 134 0.5-0.5 cr.
Badminton
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An activity course that will teach the rules, techniques, fundamental skills and strategies of the game of badminton.(F, Sp)

P E 135	0.5-0.5 cr.
Triathlon	

P E 136 0.5-0.5 cr. Volleyball

An activity course for the beginning/ intermediate volleyball player. The majority of time will be spent on development of the basic skills required in volleyball, learning the rules of the game, and applying what is learned in actual play.(Sp)

P E 137 0.5-0.5 cr. Karate

Students will learn basic punches, kicks, strikes and stances. Both physical and psychological principles as they apply to the art, the sport and self-defense will be utilized. Class work includes Kumite (partner drills and free sparring), Kata (form practice), stretching and conditioning exercises. This is a A?no contactA? style of Karate training.(not offered on a yearly basis)

#### P E 138 Aerobics

The emphasis in this course is on development and maintenance of cardio respiratory fitness, muscular strength and endurance, flexibility and healthy body composition through participation in aerobics and muscular conditioning exercises. (F,Sp)

#### P E 139

0.5-0.5 cr.

**Introduction to Yoga** An introduction to yoga with the major emphasis on Hatha Yoga. Class activity will focus on the use of basic asanas (positions) for health, fitness, relaxation, and meditation with other aspects of yoga

## P E 140 0.5-0.5 cr.

integrated into the classes.(F,Sp)

#### **Movement as Meditation**

An exploration of various forms of movement as a meditative experience. The focus is on two of the four basic paths to meditation: the route of the body and the path of action. Activities explored will include mind/body awareness, traditional Eastern movement based meditations such as yoga, tai chi, and dance and western fitness/sport/movement activities.(F, Sp)

0.5-0.5 cr.

0.5-0.5 cr.

### P E 141

#### Basketball Skills

An opportunity to learn fundamental skills, rules and strategies of basketball. The majority of time will be spent on development of basic skills, including dribbling, shooting, and passing. Offensive and defensive strategies and incorporating team play will also be addressed.(F, Sp)

#### P E 142

Cardio Kickboxing

A lifetime activity course which is a combination of aerobics, boxing, and martial arts. Designed for individuals interested in developing cardiorespiratory and general strength fitness as well as emotional and psychological benefits through the aerobic activity of cardio kickboxing. (not offered on a yearly basis).

#### P E 190 0.5-0.5 cr. Individual Physical Activity

An individualized/prescriptive physical education activity course designed for students with special medical requirements. Prerequisites: permission of instructor and physician's approval.(F,Sp)

P E 289	0.5-3 cr.
Special Topics in Physical Edu	ication

P E 389 0.5-3 cr. Special Topics in Physical Education

P E 489 0.5-3 cr. Special Topics in Physical Education

### PHYSICAL EDUCATION PROFESSIONAL

#### P ED 105

0.5-0.5 cr.

0.5-0.5 cr.

1 cr.

**Backpacking/Wilderness Awareness** Development of skill proficiency as well as knowledge about backpacking, necessary equipment, safety and related items that enhance the activity of backpacking for a leisure and lifetime endeavor. Overnight camping is required. Special course fee.(F)

#### P ED 106 1 cr. Canoeing

The theory and skill development of canoeing for a recreational leisure lifetime activity. Prerequisite: swimming skills. Added costs.(SS)

### 200

### **PED 108**

#### Health and Fitness for Life

Analysis of the consequences of personal decisions and lifestyle choices related to the five dimensions of health and principles of physical fitness. This course is focused on individual assessment of current health status and making personal lifestyle modifications. Class includes lecture and lab. Students must enroll in separate lab section which reinforces information provided in the lecture section.(F, SP)

P ED 109	1 cr.
<b>Recreational Climbing</b>	
A beginning course in rock climbing	Basic
techniques will be taught concerning	knots,

ots. belaying, rappelling, climbing, safety and equipment.(F,SP)

P ED 133	1 cr.
Advanced Wrestling	

#### **PED 145** Lifeguard Training

The standard American Red Cross course designed to prepare the student to assume life guarding responsibilities. Prerequisites: swim 500 yards using front crawl, sidestroke, breaststroke, and elementary backstroke; surface dive to 8 feet, retrieve a 10 lb brick and return to starting point. Tread water for two minutes using legs only. There will be a special course fee for this class.(F)

P ED 146 Lifeguard Training Instruction	1 cr.
P ED 147 Water Safety Instructor	2 cr.

The standard American Red Cross course designed to prepare the student to assume teaching responsibilities at all levels of swimming. Prerequisites: must be at least 17 years of age at the start of the course and must be able to perform the following strokes: front crawl, back crawl, side stroke, elementary back stroke, and breast stroke. There will be a special course fee for this class.(Sp)

## P ED 149

**Gymnastics II** 

This course will focus on learning and performing intermediate gymnastics skills and teaching methodology for the floor exercise, vault, balance beam, uneven bars, parallel bars, high bar, rings and pommel horse. Safety concerns, progressions, routines and conditioning programs will be included. Prerequisite: PE 101.(SP)

#### **PED 150** 1 cr. Winter Camping

Development of skill proficiency as well as knowledge of safety equipment and problems to winter camping.(Sp)

#### **PED 153** 2 cr. **Sports Biomechanics PED 155** 0.5-0.5 cr. **Social Dance**

#### P ED 161 Introduction to Health and Human

Performance

2 cr.

1 cr.

The purpose of this course is to serve as an introduction to the professions related to health and human performance. The course provides an overview of and introduction to the history and philosophical nature of the profession: scientific and scholarly disciplines; career exploration and professional development; personal fitness, health and skill assessment; and departmental procedures, policies and expectations.(F,Sp)

#### **PED 166 Football Officiating**

The study and practical application of rules and techniques of football officiating.(F)

#### **PED 167** 1 cr. **Basketball Officiating**

The study and practical application of rules and techniques of basketball officiating.(F)

#### **PED168 Officiating Women's Gymnastics**

The study and practical application of rules and techniques of judging womenA?s gymnastics at the junior and senior high school level. Prerequisite: P ED 149 or consent of instructor.(F)

#### **PED 196 Individual Sports**

This course will provide Health and Human Performance majors with an introduction to the skills needed to successfully teach track and field, gymnastics, and swimming in the K-12 setting. Emphasis is placed on the execution and demonstration of proper skill technique and the teaching of those skills. Skills testing and practical teaching experiences are provided. (F, Sp)

### **PED 198 Team Sports**

This course will provide Health and Human Performance majors with an introduction to the skills needed to successfully teach basketball, team handball, and volleyball in the K-12 setting. Emphasis is placed on the execution and demonstration of proper

skill technique and the teaching of those skills. Skills testing and practical teaching experiences are provided. (F,Sp)

#### **PED 201**

1 cr.

3 cr.

1 cr.

1 cr.

2 cr.

2 cr.

#### 3 cr. **Outdoor Education Concepts and Skills** for Summer Activities

Concepts, skills, and leadership techniques for adventure education summer activities including backpacking, canoeing, climbing, orienteering, and initiative games. Experiences include off-campus experience and at least one over night trip. Prerequisites: A minimal level of fitness for participation in the listed activities and the ability to swim 200 meters. There is a special course fee.(F,Sp)

#### P ED 202

#### **Outdoor Education Concepts and Skills** for Winter Activities

3 cr.

Concepts, skills, and leadership techniques for adventure activities including cross country and downhill skiing, winter camping, ice skating, initiative games, and other challenge activities. Instruction includes off-campus sites and at least one overnight trip. Prerequisites: Minimal level of fitness for participation in the listed activities. There is a special course fee.(Sp)

#### **PED 213** 2 cr. **Care and Prevention of Athletic Injuries**

Theory and practice of the prevention and treatment of athletic injuries including assessment and rehabilitation. Prerequisites: HEAL 263 and SFED 200. (F,Sp)

#### **PED 241** 3 cr. **Motor Learning**

An introduction to the field of motor learning and human theories and implications concerning motor skill acquisition and performance. An emphasis will be placed on issues related to skill classification, stages of learning, motor programs, attention, memory, individual differences, knowledge of results, practice conditions, motivation and the application of psychological factors.(F)

#### P ED 245 3 cr.

**Motor Development Throughout Life** An investigation of motor development as an important component of the foundation needed to understand human behavior as it relates to teaching, learning, and performing motor skills. Students will study changes in characteristics of perceptualmotor behavior from infancy through adulthood.(F)

**PED 248 Creative Swimming** 

#### P ED 251 Field Sports

This course will provide Health and Human Performance majors with an introduction to the skills needed to successfully teach flag football, soccer, speedball, and floor hockey in the K-12 setting. Emphasis is placed on the execution and demonstration of proper skill technique and the teaching of those skills. Skills testing and practical teaching experiences are provided. Prerequisite: P ED 161. (F, Sp)

#### P ED 252 Racquet Sports

This course will provide Health and Human Performance majors with an introduction to the skills needed to successfully teach racquetball, tennis, pickle ball, and badminton in the K-12 setting. Emphasis is placed on the execution and demonstration of proper skill technique and the teaching of those skills. Skills testing and practical teaching experiences are provided. (F, Sp)

#### P ED 253

**Lifetime Sports** 

This course will provide Health and Human Performance majors with an introduction to the skills needed to successfully teach softball, bowling, golf, and weight training in the K-12 setting. Emphasis is placed on the execution and demonstration of proper skill technique and the teaching of those skills. Skills testing and practical teaching experiences are provided. Special course fee.(F, Sp)

#### P ED 255

Techniques of Sport Fishing

A unique approach to sport fishing and all aspects of the activity, including boats, sonar equipment, structure fishing, and fishing equipment.(Sp)

P ED 257	2 cr.
Rhythms	

#### P ED 268 Beginning Football

Instruction in the fundamental skills related to all positions in football.(Sp)

#### P ED 269 Coaching Baseball/Softball

### P ED 270

Athletic Training Practicum

A practicum (100 hrs. of field experience required) with special attention given to modalities of treatment, relationship of trainer to coaches and athletes, organization and administration of the athletic training room, and the duties of an athletic trainer. Prerequisites: P ED 213, SFED 200, HEAL 263. (F,Sp)

#### 2 cr. P ED 271 Practicum I

2 cr.

2 cr.

1 cr.

1 cr.

2 cr.

2 cr.

This course is designed to provide initial experiences in a variety of job settings including sport industry, health clubs, fitness programs, recreation programs, camp programs, hospitals and school settings. The purpose is to allow students to gain a sense of direction for future study and internships. Prerequisites: Health and Human Performance major, P ED 161, and consent of the instructor.(F, Sp, SS)

#### P ED 274 1 On-Campus Pre-Student Teaching

P ED 289 0.5-3 cr. Special Topics in Physical Education

### P ED 300

Adapted Physical Education This course will provide an overview of physical education activities for individuals with disabilities. Special emphasis on adapting activities to meet individual needs in the least restrictive environment. Prerequistes: P ED 245 and be junior standing. (F, Sp, SS)

## P ED 301 3 cr.

Foundations of Outdoor Leadership Designed to provide an overview of the philosophy, history, programming and leadership of outdoor adventure education (OAE), this course will: 1) analyze how OAE has evolved as a medium for individual and group development; 2) familiarize students with the standard programs of Outward Bound, the National Outdoor Leadership School and special focus on the curriculum of the Wilderness Education Association; 3) examine the theory and practice of leadership in OAE with emphasis on judgment and decisionmaking; and 4) provide practical lab experiences that will enhance student leadership ability when applied to group dynamics, wilderness tripping logistics and other skills. Special course fee required. Co-listed as PED 301. (F)

P ED 305 3 cr. Developed and Adapted Physical Education

#### P ED 326

#### Techniques for the Physical Education Elementary Teacher

Instructional materials and teaching methods in elementary school physical education. There will be activity in this class, be prepared. Designed for majors in elementary education. There will be 5 hours outside observation time. Prerequisite: TED 211 or 212.(F, Sp)

1 cr. I

#### P ED 344 Teaching Adapted Aquatics

P ED 350		2 cr.
Biomechanics and	Kinesiology	Seminar

#### P ED 351 Coaching Young Athletes

This course focuses on the information that addresses the needs of coaches who work with children and youth. A wide range of topics will be covered including developing a coaching philosophy, sport psychology, sport pedagogy, sport physiology and sport management as it relates to coaching youth sports.(Sp)

#### P ED 352

#### 2 cr.

**Coaching Women's Gymnastics** 

This course covers basic to advanced gymnastics skills, techniques, progressions, drills and rules for the vault, uneven bars, balance beam and floor exercise. Information regarding safety, motivational issues, organizational concerns, administrative duties, conditioning programs, psychological factors and coaching philosophy will be presented. (F, alternate years)

#### P ED 354

#### Biomechanics

Biomechanics is the field of study concerned with the mechanical analysis of biological systems. Mechanical principles and the laws of physics as they apply to human movement are introduced in this course. These principles are then applied to movement observation and analysis. Students are introduced to the tools of biomechanics and the role of biomechanics in equipment design. Prerequisite: HEAL 262 or 263.(F,Sp)

### P ED 356

**Tennis Coaching** 

2 cr.

2 cr.

2 cr.

3 cr.

A study of the basic and advanced skills and strategies needed to be a tennis coach. Information regarding motivational issues, organizational concerns, administrative duties, conditioning and personal coaching philosophy will be presented. (not offered on a yearly basis)

#### P ED 358

2 cr.

### Track Coaching

A study of the strategy, techniques, organization and administration of coaching track with opportunities for laboratory experience.(Sp)

### P ED 359

### Volleyball Coaching

A study of the basic and advanced strategies and skills needed to be a successful volleyball coach. The student will gain practical experience through

2 cr.

1 cr.

202

observation and participation at volleyball games, practices and tournaments. (F)

#### P ED 363 **Psychology of Coaching**

Investigation and discussion of psychological factors related to coaching competitive sports. Intended for students who are seeking a sound understanding of the major psychological components that go into individual and team success.(F,Sp)

#### **PED 364**

#### Wrestling Coaching

This course deals with methods and skills necessary to coach the sport of wrestling. Information regarding administrative concerns, practice and game organization, and personal coaching philosophy will be presented. (not offered on a yearly basis)

#### P ED 365

#### **Football Coaching**

This class deals with theory, tactics, strategy, organization, practice and game preparations, film development, administration and pre-planning for a job in education. (alternate years)

P ED 366	2 cr.	
Swimming Coaching		P ED 380
The analysis of competitive swimmir	ıg	Biomechanics

with examination of diet, training methods, motivation drills, mechanics, budget, scheduling, administrative and organization of all aspects of a swim team.(alternate years)

## P ED 367

#### **Basketball Coaching**

An in-depth study of the various systems and styles of basketball as it is played today. The class will detail various coaching and coaching styles. Emphasis is placed on offensive and defensive theory and administrative and organizational aspects of coaching basketball. (F)

#### **PED 368**

**Ice Hockey Coaching** 

Theories, tactics and strategies involved in the coaching of ice hockey. This class emphasizes proper teaching methods of basic fundamental skills, understanding offensive and defensive strategies, administrative concerns, and practice and game organization.(Sp)

### P ED 369

#### **Baseball/Softball Coaching**

A study of the strategy, techniques, administration and organization of coaching baseball and softball. Required laboratory experiences.(Sp)

#### P ED 370 **Adapted Physical Education Practicum**

#### PED 371 **Recreation Field Study**

3 cr.

2 cr.

2 cr.

2 cr.

2 cr.

2 cr.

On-the-job experience in a recreational leadership setting. Requires 50 hours contact time per credit along with written work required by instructor. Prerequisites: P ED 201, 202 and P ED/ESM 301 and consent of instructor.(Sp)

### **PED 375**

#### **Physical Activity Behavior**

The emphasis in this course is on understanding physical activity behavior and the types of interventions that are useful in promoting physical activity.(F)

### **PED 378** 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)

#### and Kinesiology

Application of motion analysis systems and other biomechanical tools in analyzing movement. This course provides an opportunity for an individual research project. Prerequisite: P ED 354 or by consent of instruction.(not offered on a yearly basis)

#### 0.5-3 cr. P ED 389 **Special Topics in Physical Education**

3 cr. P ED 435 **Curriculum: Physical Education K-12** 

### **PED 450** Sport, Fitness, and Recreation

#### Management

Basic principles and practices of developing and administering the physical education, athletic and sport management programs. Course will primarily focus on administrative theories, principles, financial management, legal liability, risk management, facility management and planning, public relations, and leadership.(F)

#### **PED 455**

#### **Organization and Administration of Physical Education Programs**

This course will provide the physical education major with the basic principles and practices to develop and administer a physical education program. This course will primarily focus on management

functions, public relations and promotion, financial management, legal liability, risk management, curriculum design, and program evaluation. Prerequisites: P ED 251, 252, 253, 196, 198, and 361, and DANC 257 and 362.

#### P ED 460

**Beginning Techniques in Lab Research** Fundamental techniques in the use of laboratory equipment designed for human physiological testing. Emphasis is on body composition and anaerobic and aerobic power as they relate to physical fitness. Opportunity for students to pursue individual projects. Prerequisite: HEAL 366.(not offered on a yearly basis)

2 cr.

2 cr.

1 cr.

#### P ED 461 3 cr. Senior Seminar in Health and Human Performance

This course is designed as a culminating course prior to student teaching or the internship experience. Methods and materials for the evaluation of students in physical education and human performance will be experienced, including written assessments and performance tests. Selected utilization of computers for data storage and manipulation is also included. The completion of the student professional portfolio and interview portfolio will be a requirement for successful completion of the course. The portfolio will be presented in electronic format. This course will provide students the opportunity to experience mock interviews and develop resume writing and presentation skills useful in job searching and other postgraduate situations.

## **PED 465**

Scientific Principles of Conditioning This course will focus on application of scientific theory and on designing strength and conditioning programs. The course strives to answer the questions: Why and how we train the way we do. Prerequisites: HEAL 366 and 263 or HEAL 262 or instructor consent.(F,Sp)

## **PED 466**

**Exercise Leadership** 

The purpose of this course is to provide prospective professionals in health and physical education with essential theoretical information and practical know-how to lead safe and effective group exercise/fitness classes.(F,SP)

#### P ED 471 12 cr. **Practicum II**

A semester of field experience in an area related to Health and Human Performance under the guidance of an experienced supervisor. Fifty hours of field experience are required for each credit. Prerequisites:

3 cr.

1-4 cr.

3 cr.

3-6 cr.

2 cr.

3 cr.

junior/senior standing Health and Human Performance major and consent of instructor.(F,Sp)

3 cr.

1-3 cr.

#### P ED 472

#### **Coaching Practicum**

The coaching practicum is designed to provide the student an in-the-field coaching experience in which she/he can, in a supervised situation, develop, test and modify her/his coaching knowledge, skills and attitudes. The basic objective is to provide the student with a realistic experience at a level and in a setting similar to that in which she/he wishes to obtain employment. Prerequisites: P ED 213, 363, coaching course in sport area in which practicum is to be taken or consent of instructor.(F, Sp)

#### P ED 489 0.5-3 cr. Special Topics in Physical Education

#### P ED 490 Readings in Physical Education

Designed as a supplement to studentsA? required course work, this course allows students the opportunity for an in-depth study of issues or problems in physical education. Prerequisite: consent of instructor.(F,SP)

#### PHYSICAL EDUCATION TESTOUT

P ET 111 Archery	0.5-0.5 cr.
P ET 112 Swimming Testout	0.5-0.5 cr.
P ET 114 Bowling Testout	0.5-0.5 cr.
P ET 121 Cross Country Skiing Test Out	0.5-0.5 cr. t
P ET 124 Tennis Testout	0.5-0.5 cr.
P ET 125 Golf Testout	0.5-0.5 cr.
P ET 128 Ice Skating Testout	0.5-0.5 cr.
P ET 130 Racquetball Testout	0.5-0.5 cr.
PHILOSOPHY	

# PHIL 151 3 cr. Living Issues in Philosophy Topics covered: (1) Ethics. Frameworks and basic principles for resolving ethical

dilemmas. (2) Interface between aesthetics and ethics. Can goodness be defined as a form of beauty? Must vice be ugly? (3) Political Philosophy. Notions of justice, human rights and liberty in Western Democracies that determine what laws are fair or legitimate. (4) Religion. The proofs of God's existence; and the issue of faith and reason.(F,Sp)

#### PHIL 201 3 cr. Human Nature, Ethics and the Natural World

An examination of contrasting views of human nature set forth by: Freud (libido as the primary motivating force), Plato (supremacy of reason in humans), Skinner (humans as conditioned beings), Lorenz (aggression as the primary motivating force), Sartre (humans as unconditionally free), Hebraism (welfare of the community as the primary value, the individual as a psycho-physical unity), Christianity (Paul's doctrine of the primacy of the will over the intellect), Marx (realization of true human nature contingent upon an appropriate economic structure), Hobbes (humans as egotistical creatures), Rousseau (humans as noble but perverted by civilization), etc. Besides broadening students' grasp of the history of Western thought, the course will also make comparisons with the doctrine of the self present in the Orient (especially in the Upanishads), thus exposing students to a non-western perspective. (Sp, alternate years)

PHIL 221	3 cr.
Ancient Philosophy	
Concepts of the universe and man from	m
the dawn of western science through	
Aristotle.(F)	
PHIL 222	3 cr.
Hellenistic and Medieval Philosophy	
A study of Cynicism, Stoicism, Skepticism,	
Neoplatonism, Augustine, Anselm, Al	belard,
Aquinas, Scotus and Ockham.(Sp)	
	•
PHIL 224	3 cr.
Existentialism and Late Modern	
Philosophy	
Examination of the philosophical	
contributions of Rousseau, Hegel, Ma	ırx,

contributions of Rousseau, Hegel, Marx, Bentham, Mill, Russell, Wittgenstein and Ryle.(Sp)

#### PHIL 230 3 cr. Logical Reasoning An analysis of the structure of arguments

in ordinary language: evaluating assertions; definitions; arguments by analogy; formal and informal fallacies.(F)

#### PHIL 232

#### Biblical and Philosophical Approaches to Contemporary Issues

Topics include: Interpreting claims concerning the end of the world, principles for selecting books for inclusion in the old and new testaments, resurrection reports and critical reason, use of the Bible in making ethical judgments, the Bible and capital punishment, homosexuality, environmental issues, and others.(Sp)

#### PHIL 240 Social Ethics

3 cr.

3 cr.

An analysis of opposing recent ethical arguments concerning social policy issues such as capital punishment, euthanasia, abortion, gay rights, humane treatment of animals in research, and agribusiness.(Sp)

#### **PHIL 245**

#### 3 cr.

#### Eastern Religions and Islam(g) We examine the philosophical perspectives of Islam and of the religions of Asia, namely, those of India (Hinduism and Buddhism), of China (Taoism and Confucianism), and of Japan (Shinto and Zen Buddhism). We see, not only to better understand the non-Western outlooks.

Zen Buddhism). We see, not only to better understand the non-Western outlooks, but also to apply them to contemporary America. (F)

#### **PHIL 265**

# God, Religion, Science and the Meaning of Life

An examination of philosophical issues connected with religious belief, e.g., proofs for the existence of God, the problem of evil, miracles and revelation, death and immortality, relation of faith and reason, etc.(F, alternate years)

PHIL 289	0.5-3 cr
Special Topics in Philosophy	

#### PHIL 303 Environmental Ethics

3 cr.

3 cr.

An examination of ethical issues pertaining to our relationship to the physical environment: obligations to future generations, treatment of animals, species extinction, wilderness preservation, etc.(SS)

#### PHIL 304

**Business Ethics** 

3 cr.

An analysis of the social responsibility of business; worksite genetic screening; affirmative action; whistle blowing; ethics and international business relationships.(SP)

#### PHIL 307

Greece to the Middle Ages

### **PHIL 308**

#### 3 cr.

3 cr.

3 cr.

3 cr.

**Renaissance to Marx** The course is an exploration of the major ideas and writers in the middle period of Western Political Philosophy. The course covers the period from the Renaissance through the mid-nineteenth century and emphasizes the ideas of Machiavelli, Moore, Hobbes, Locke, Rousseau, Kant, Hegel, Marx and Mill. Co-listed as HIST and PHIL 308/508. (F, alternate years)

### **PHIL 309**

#### Western Political Thought: Nietzsche to the Present

The course is an exploration of the major ideas and writers in the recent period of western political philosophy. The course covers the period from the mid-nineteenth century to the present and emphasizes the ideas of Nietzsche, Pragmatism, Freud, Ortega, Arendt, Existentialism, Phenomenology and Post-Structuralism. Co-listed as HIST and PHIL 309/509. (Sp. alternate years)

#### **PHIL 310** 3 cr. Philosophy and History of Visual Art

The course is a study of the arts in America during the colonial, revolutionary, federal and early national periods, including architecture, painting, sculpture, furniture and minor arts, by means of slide lectures and museum visits.

#### **PHIL 311** Philosophy of Law

The topics discussed are: the nature of law, law and politics, law and morality, women and the law, the question of guilt, intention and responsibility in law, the insanity defense, and the nature and purpose of punishment. these philosophical issues will get clarified by: a) examining the rationale, justification and intention of specific laws; b) examining controversial legal cases brought to the court, and the reasoning behind the verdict given, and c) discussing hypothetical cases and situations, and their possible legal resolutions.(Sp)

#### **PHIL 316 Media Ethics**

Philosophical examination of selected issues in professional journalism, public relations, and marketing communication: the aims of journalism, journalistic objectivity, advertising ethics, newsworthiness vs. privacy vs. sensationalism, ethics of photojournalism, public relations and the public interest.(yearly)

### **PHIL 323**

#### Science and the Philosophers of the Age of Enlightenment

Philosophers of the Age of Enlightenment express views on topics in the philosophy of science, like a possible scientific explanation of the mind and its interaction with the body, whether causal explanations in science are objectively valid, whether mathematical premises (like the exioms of Euclid) are merely hypothetical constructs of self evident claims, the nature of scientific explanation, and the nature of space and time. Does modern science refute or support these views? The course also provides a good introduction to philosophers from Descartes to Kant.(F)

### **PHIL 369**

American Intellectual History The development of American thought from Puritanism to the present. Co-listed as PHIL 369. (occasionally)

### **PHIL 389** Special Topics in Philosophy

#### **PHIL 415 Philosophy of History**

This course will explore general theories of history, moving from ancient, classical and modern theories to postmodern and feminist critiques of historical writing. Emphasizing key texts and thinkers, the course will examine issues surrounding the meanings of history, historical explanations, concepts of progression, objectivity, and the uses of history. Prerequisites: senior standing or consent of the instructor.(occa sionally)

#### **PHIL 489** 0.5-3 cr. Special Topics in Philosophy

**PHIL 499** 

**Independent Study** Students will pursue a given topic in philosophy in-depth. Prerequisite: consent of instructor and filling out the History and Philosophy Department's Independent Study Contract.(F,Sp,SS)

## PHYSICS

**PHYS 101 General Physics Lab** 

#### Data acquisition, data analysis and scientific record keeping are applied to general physics experiments in mechanics, electricity and magnetism, thermodynamics, and optics. Corequisite: PHYS 161.(F)

## **PHYS 102**

3 cr.

3 cr.

0.5-3 cr.

3 cr.

1-3 cr.

1 cr.

### **General Physics Lab**

Data acquisition, data analysis and scientific record keeping are applied to general physics experiments in mechanics, electricity and magnetism, thermodynamics, and optics. Corequisite: PHYS 162.(Sp)

## **PHYS 114**

## **Basic Physics**

This course is designed to apply toward the general education science requirement. Fundamental ideas of motion, and topics selected from heat, fluids, sound, light, electricity and modern physics are used to develop analytical thought. Written laboratory reports are required. Meets the General Education laboratory requirement.(F, Sp)

## **PHYS 117**

**Basic Astronomy** 

#### 3 cr.

4 cr.

1 cr.

Designed to apply toward the general education science requirement, this course examines the fundamental ideas from the dawn of time to the space age about the Earth, Moon, planets and constellations. The origin and evolution of the solar system, stars, black holes, quasars, galaxies and the universe are covered. The possibility of space travel and extraterrestrial life is explored.(F,Sp)

### **PHYS 151 General Physics**

This is a non-calculus general physics course for life sciences, pre-professional (excluding pre-engineering), agriculture and earth science students which covers mechanics, fluids, waves and thermodynamics. Prerequisites: MATH 147 or equivalent; or, consent of instructor. (F,SS funding permitting)

#### **PHYS 152** 4 cr. **General Physics**

This is a non-calculus general physics course for life sciences, pre-professional (excluding pre-engineering), agriculture and earth science students which covers electricity, magnetism, optics, modern physics including nuclear physics. Prerequisites: PHYS 151, MATH 147 or equivalent; or, consent of instructor. Corequisite: PHYS 157.(Sp, SS funding permitting)

#### **PHYS 156 General Physics Lab**

Data acquisition, data analysis and scientific record keeping are applied to experiments covering mechanics, electricity and magnetism, thermodynamics, optics and modern physics.(F, SS funding permitting)

#### **PHYS 157**

#### **General Physics Lab**

Data acquisition, data analysis and scientific record keeping are applied to experiments covering mechanics, electricity and magnetism, thermodynamics, optics and modern physics.(Sp,SS funding permitting)

#### **PHYS 161 General Physics**

## Introductory mechanics, fluid mechanics, and thermodynamics. For physics majors it is recommended that General Physics Laboratory I, PHYS 101, be taken

concurrently with PHYS 161. Corequisite: MATH 166.(F)

#### **PHYS 162 General Physics**

#### Electricity and magnetism, and optics. For physics majors it is recommended that General Physics Laboratory II, PHYS 102 be taken concurrently with PHYS 162. Corequisite: MATH 166.(Sp)

#### **PHYS 204**

#### **Intermediate Physics Lab**

This is a writing intensive course. Selected physics experiments of an intermediate level, taken from classical and modern physics, are included. This course is required for the physics major. It may be used as an elective in the physics minor, but is not required. Prerequisite: PHYS 162. Corequisite: PHYS 362.(Sp)

#### **PHYS 211 Scientific Program**

Essentials of computer programming for scientists and engineers using the C programming language. Topics include data types, file I/O, branching and control statements, loops, data arrays and functions. Computer applications will draw on practical problems in physics and engineering. Prerequisites: MATH 166 or consent of instructor.(F)

#### **PHYS 220** Science of Light

#### An introduction to light, color and optics for non-scientists. Topics covered include the origin of light, visible and invisible light, basic optical systems, lasers, atmospheric phenomena, color, human vision and perception. Prerequisite: MATH 146.(Sp)

#### **PHYS 250** Statics

This course provides an understanding of equilibrium and the ability to analyze the forces in equilibrium situations. Topics covered include force and moment vectors, resultants, principles of statics, applications to simple trusses, frames and machines,

distributed loads, hydrostatics, properties of areas, centers of mass, area moments of inertia, laws of friction and method of virual work. Prerequisites: PHYS 161, MATH 166. Co- or prerequisite MATH 167. Co-listed as GENG 250.(Sp)

#### **PHYS 252 Dynamics**

1 cr.

4 cr.

4 cr.

1 cr.

3 cr.

3 cr.

3 cr.

This course provides an understanding of the dynamics of particles and rigid bodies. The topics included are kinematics, kinetics, work and energy methods, impulse and momentum methods in two and three dimensions including rotation. Prerequisites: PHYS 152 or 162 and PHYS 361 or MATH 266. Co-listed as GENG 252. (SP)

#### **PHYS 254 Deformable Body Mechanics**

This course provides an understanding of stress and strain in typical structures and the ability to analyze and design such structures. Topics included are axial loading and deformation, stress and strain at a point, forces and moments, material behavior, linear elasticity, torsion, statically indeterminate torque loaded members, bending of beams, combined loadings, stress and strain transformation, Mohr's circle, statically determinate beams and shafts, buckling of columns and energy methods. Prerequisites: PHYS 161 and 250, MATH 166. Co- or prerequisite Math 167. Co-listed as GENG 254.(F)

#### **PHYS 264 General Physics**

Modern physics. For physics majors it is recommended that General Physics laboratory 204 be taken concurrently with 264. Corequisites: PHYS 361 or MATH 266.(Sp)

#### **PHYS 279** 1 cr. **Cooperative Education and Internship I** An experience in which the student learns and applies basic professional

skills by performing on- the-job tasks and using classroom knowledge in practical situations. If a student is in the Cooperative Education program, then this course preceeds PHYS 379: Internship. Prerequisites: Completion of PHYS 161 and 162, sophomore standing, permission of Physics department internship supervisor.(F)

#### **PHYS 289 Special Topics in Physics**

### **PHYS 301**

#### **Advanced Physics Lab**

This is a writing intensive course. This laboratory familiarizes students with the statistical analysis of experimental data.

Emphasis is placed on experimental design to minimize experimental uncertainty. Early in the semester experiments illustrating and applying Gaussian and Poisson statistics, least-squares fitting and propagation of errors are performed. These techniques are then used in experiments on advanced mechanical systems. Extensive use is made of computers in the analysis. Formal experiment writeups required. Prerequisites: PHYS 204, 264, 311, 362 and MATH 331.(F)

#### **PHYS 302 Advanced Physics Lab**

This is a writing intensive course. This course emphasizes the training of students for experimental research. Experimental design, error analysis and a variety of data analysis methods are integrated into several extended experiments selected from many areas of physics. Students learn how to work effectively as part of a research group. Formal experiment writeups and oral reports are required. Prerequisite: PHYS 301.(Sp)

## **PHYS 311**

## **Electronics (Circuits)**

A course structured as lecture and closely coordinated laboratory. Lecture topics include Kirchoff's laws, circuit theorems, Thevenin's and Norton's theorems, complex excitations, phasors, and an introduction to computer based circuit analysis. Circuits covered include filters, integrators, differentiators, resonant circuits, power supplies, and amplifying circuits. Resistors, capacitors, inductors, and semiconducting devices are discussed. The laboratory addresses safety and proper use of laboratory equipment such as power supplies, oscilloscopes, digital meters, etc. Prerequisites: MATH 167 and either PHYS 162 or 152 or consent of instructor.(F)

#### **PHYS 312**

#### 3 cr.

3 cr.

3 cr.

**Electronics: Linear Integrated Circuits** A course structured as lecture and closely coordinated laboratory. The application of feedback to operational amplifiers used in non-inverting, inverting, summing, difference, active filter, integrator, and differentiator configurations is discussed. Special ICs including the 555 timer, voltage regulators, optoisolators and optocouplers, comparators, and phase locked loops, and an introduction to computer based circuit analysis are covered. Prerequisite: PHYS 311 or consent of instructor.((Sp, alternate years)

#### **PHYS 313 Electronics (Digital)**

3 cr.

A course structured as lecture and closely coordinated laboratory. Lecture topics include: Boolean Algebra, number

3 cr.

3 cr.

4 cr.

0.5-3 cr.

systems, data formats, combinatorial and sequential logic, Karnough Mapping, timing diagrams, and an introduction to computer based circuit analysis. The basics of instrumentation busses and microprocessor architecture, programming, and interfacing are also covered. The laboratory investigates logic families, gates, counters, adders, decoders, shift registers, busses and microprocessor programming and interfacing. Prerequisites: PHYS 162 or 152 or consent of instructor.(Sp, alternate years)

## **PHYS 318**

Astrophysics

The applications of physical principles to astronomical systems are examined. Topics covered include the application of the Law of Gravitation to stellar systems and the evolution of stars and cosmology. Observations are made at the UW-RF Observatory. Prerequisites: PHYS 117 or 152 or 162.(Sp, alternate years)

#### **PHYS 321** Science of Sound

Designed to provide non-scientists with a deeper understanding of the physics underlying the production and transmission of sound. The course will be taught as a hands-on course with relatively little traditional lecture. Students will make and keep three simple musical instruments (\$10 fee for materials). Prerequisites: PHYS 114 or consent of instructor.(J-term, SS)

#### **PHYS 324** Acoustics

An introduction to the study of wave generation and propagation. The mathematical theory will be illustrated by concrete examples drawn from music, geophysics, and other branches of physics. Designed for students of physics and physical science. Prerequisites: PHYS 162, PHYS 361 or MATH 266.(Sp, alternate years)

#### **PHYS 331**

#### **Curriculum Physics**

This course is designed as a detailed study of curriculum materials available to the secondary school teacher. Emphasis is on laboratory procedures and innovative teaching strategies at the secondary level. Prerequisite: consent of instructor.(upon student demand)

#### **PHYS 360**

### Science, Technology, Society and the Work Place

This course will explore the connections between science, technology and social policy, and how they can lead to drastic changes in the work force. It will explore the impact that major employment changes have had on society, and look for lessons to help students navigate their way through the rapidly changing twenty-first century work place. (F, Sp).

#### **PHYS 361**

**Mathematics of Physics and Engineering** This course is designed as a study of vector analysis through Stokes', Green's, and the divergence theorems; curvilinear coordinates; series solutions of differential equations; complex variables with emphasis on integration in the complex plane. Emphasis is on problem solving applications. Prerequisites: PHYS 152 or 162, MATH 167.(F)

### **PHYS 362**

3 cr.

2 cr.

3 cr.

3 cr.

3 cr.

#### Mathematics of Physics and Engineering

One third of the semester is spent on Fourier analysis, Fourier integral transforms, convolution, the Fast Fourier transform, and application of these concepts to physical problems. Two-thirds of the semester is devoted to a study of statistical treatment of experimental data, covering mean, variance, the chi-squared test and least squares fitting. The writing of computer programs is an integral part of the course. Prerequisites: PHYS 152 or 162, 211 or CSIS 162 and MATH 167.(Sp)

#### **PHYS 379**

#### 3 cr. **Cooperative Education and Internship** A short term apprenticeship (usually

lasting for one summer) with a business or government organization. The student learns to perform the tasks of a regular employee, applying theoretical knowledge and research to practical situations. In addition, the student learns about career opportunities open to Physics majors. In the Cooperative Education program, this course follows PHYS 279. Prerequisites: Junior or higher standing, completion of PHYS 264, permission of Physics Department internship supervisor, PHYS 279 or consent of instructor. PHYS 379 may be repeated for a total of 6 credits, but only 3 credits of these may be applied to the physics major.

PHYS 389 Special Topics in Physics	0.5-3 cr.
PHYS 401 Advanced Physics Lab	3 cr.
PHYS 402 Advanced Physics Lab	3 cr.
PHYS 404 Aerospace Workshop	1-3 cr.
PHYS 415 Thermodynamics Students will study the laws of	3 cr.

#### Students will study the laws of thermodynamics, equations of state, free

energy functions, phase changes and relationships between thermodynamic functions, with applications to thermodynamic systems. Includes an introduction to statistical mechanics. Prerequisites: PHYS 162 and MATH 266.(F,alternate years)

#### **PHYS 420 Optics**

3 cr.

3 cr.

Modern optics topics are covered at an advanced level. Topics covered include advanced geometrical optics, Frauhofer/ Fresnel diffraction, interferometers, polarization, electro-and magneto-optical effects, laser theory, liquid crystals, nonlinear optics, Fourier optics. A two hour laboratory is held each week. Prerequisites: PHYS 162 and PHYS 362.(F, alternate years)

4 cr.

4 cr.

4 cr.

4 cr.

3 cr.

### **PHYS 426**

#### **Nuclear and Particle Physics**

The course is a study of the fundamentals of nuclear physics, including nuclear properties, radioactive decay, nuclear reactions and particle physics. Prerequisites: PHYS 264, 465, and MATH 331.(Sp, alternate years)

#### **PHYS 427 Condensed Matter Physics**

This course is an advanced undergraduate course in the physics of solids. Topics covered include crystal types and the form of solids, lattice dynamics, behavior of electrons in metals, semiconductors, superconductors and dielectric and magnetic properties of solids. Prerequisites: PHYS 264, 465, and MATH 331.(Sp,alternate years)

#### **PHYS 441 Classical Mechanics**

This course provides a comprehensive survey of advanced classical mechanics. Particle dynamics, central forces, accelerated frames of reference, rigid body mechanics, harmonic oscillations, Lagrange's equations and Hamilton's equations are examined. Prerequisites: PHYS 264, 361 and MATH 331.(F, a;termate uears)

•	PHYS 442	4 cr.
	Electricity and Magnetism	
	Electrostatics, magnetostatics, Gauss'	
•	and Ampere's Laws, induction effects,	,
	dielectric effects, paramagnetism,	
	diamagnetism, Maxwell's equations,	
	radiation, dispersion. Prerequisites: PH	IYS
	264, 361, MATH 331.(Sp, alternate ye	ears)

#### **PHYS 465 Quantum Mechanics**

This course provides an introduction to the concepts and mathematical formalism

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of quantum mechanics. The primary emphasis is on detailed exploration of one-dimensional quantum mechanics using wave mechanics and Dirac notation. Prerequisites: PHYS 264, 361, MATH 256 and 331.(F, alternate years)

#### **PHYS 485** Seminar

This is a writing intensive course. Each student enrolled in seminar researches a special problem, writes a paper on the problem, presents a practice seminar to the seminar class, and presents a formal seminar and a written report to the physics department. Prerequisite: senior standing.(F, Sp)

**PHYS 489 Special Topics in Physics** 

#### **PHYS 495**

**Undergraduate Research** Through this course, students can have an opportunity to work with a physics department staff member on an ongoing research project of mutual interest. The area of research is determined by the nature of projects currently underway. The course may be repeated. It is expected that the student will spend three hours per week during the entire semester per credit earned. A total of three credits may be applied to a physics major and two credits to a physics minor. Prerequisite: consent of instructor.(F,Sp)

#### **PHYS 499** 1-4 cr. **Independent Study** This course is an opportunity for advanced level physics students who wish to work

independently on a topic or problem in physics. A paper describing the research is required. Prerequisite: junior or senior standing or consent of the faculty member advising the study.(F,Sp)

#### **PIGEON LAKE**

PL 498 **Field Ornithology** 

#### **PIGEON LAKE ART**

**PART 289 Special Topics - PL** 

**PART 290 Special Topics - PL** 

#### **PART 327** Studio - Clay

Advanced investigation of ceramic materials as media of expression; further development of manipulative skills, ceramic technology and personal modes

of expression. Materials fee is required. Prerequisites: ART 227 or consent of instructor. (F, Sp)

#### **PART 329** Studio - Glass

1 cr.

0.5-3 cr.

1-2 cr.

2 cr.

2 cr.

2 cr.

2-3 cr.

A comprehensive course designed to meet the individual student's quest for knowledge, skill and personal expression through the use of glass and other material utilizing a variety of processes. Materials fee is required. Prerequisites: ART 229 or consent of instructor. (F, Sp)

#### **PART 335** 2-3 cr. Studio - Photography

Continued investigation of photography as a creative medium for self-expression through the introduction of additional darkroom and/or digital techniques. Emphasis on preparation of personal work for portfolio, competition, and exhibition. Prerequisite: ART 235 or consent of instructor. Materials fee is required. (F, Sp)

PART 389 Special Topics - PL	2 cr.
PART 390	2 cr.
Special Topics - PL	
PART 489	2 cr.
Special Topics - PL	
PART 490	2 cr.
Special Topics - PL	

#### PIGEON LAKE BIOLOGY

PBIO 444	2 cr.
Field Ornithology - PL	

**PBIO 498** 2 cr. **Special Topics - PL** 

#### POLITICAL SCIENCE

POLS 113	3 cr.
Introduction to America and Politics	n Government
POLS 114	3 cr.
National State and Loca	al Government

National, State and Local Government This course is designed as an examination of American government at the national, state and local levels including an assessment of the key philosophical and ideological roots of the American experience, the components of the policymaking process, as well as major actors and institutions in the American political system from the national, state and local levels of government.(F,Sp)

# **POLS 200**

#### **Political Analysis**

Introduction to the discipline of Political Science including examination of the major fields within the discipline, historical development of the academic study of politics, exploration of the basic methods of political inquiry and analysis, and discussion of the key concepts, models and theoretical approaches to the study of politics, including the contemporary and future state of the discipline.(Sp)

#### **POLS 211**

#### 3 cr. **Government and Politics in Minnesota** and Wisconsin

This course is designed to study government and politics and the forces that shape them in the states of Minnesota and Wisconsin.(not offered on a regular basis)

# **POLS 212**

The Politics of Equality and Inequality in The United States (d)

The course will examine the theoretical and empirical aspects of politics and policies that advantage or disadvantage groups by reason of race, ethnicity, and other factors in the United States.(alternate years)

#### **POLS 225**

3 cr.

3 cr.

3 cr.

**Public Administration** This course provides an exploration of the field of public administration and the growth of government and bureaucratic power in the U.S. The distinctive features of public goods and services, decisionmaking and leadership in the public sector, program evaluation and termination are presented and discussed. Case studies and experiential exercises are incorporated throughout the course to strengthen the critical connection between theory and application in public administration. Examples are drawn from the national, state and local levels of government.(alternate years)

#### **POLS 230**

3 cr.

**Contemporary Political Ideologies** The course explores the basic principles of democracy, the range of American liberal and conservative perspectives and significant ideologies that exist outside the U.S. including Socialism, Marxism, Fascism, Environmentalism, Islamist and Liberation thought. (F, Sp)

#### **POLS 245**

3 cr.

Introduction to Comparative Politics (g) This course introduces basic concepts and methods for the study of comparative politics. It will also survey and compare the political development, political processes, political institutions and public policies of various countries from three different categories: industrial democracies,

Communist or Socialist systems, and Third World systems.(F)

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

#### POLS 253 State and Local Politics

A comparative examination of state and local governments and politics in the United States. Topics include: the development of federalism, political cultures of the states, components of the policymaking process, selected contemporary policy issues at the state and local levels, and state and local budgetary politics.(F)

#### POLS 256 Public Policy Making

An exploration of the public policymaking process in the U.S. Topics covered include: analysis of the key components and actors in the policymaking cycle from issue creation through policy evaluation and termination; competing, explanatory models of policymaking; and in-depth analysis of selected domestic policies in the U.S. such as social welfare, education and the environment.(not offered on a regular basis)

#### **POLS 260**

#### Introduction to International Relations (g)

This course introduces basic issues, concepts, and methods for the study of international relations. It surveys the evolution of the current international system, and examines major international political instruments such as war, trade, international organization, and international law. Current developments and issues in the international system are emphasized throughout the term. (Sp.)

POLS 289 Special Topics in Political Science	0.5-3 cr.
POLS 307 Greece to the Middle Ages	3 cr.

#### **POLS 308**

#### **Renaissance to Marx**

The course is an exploration of the major ideas and writers in the middle period of Western Political Philosophy. The course covers the period from the Renaissance through the mid-nineteenth century and emphasizes the ideas of Machiavelli, Moore, Hobbes, Locke, Rousseau, Kant, Hegel, Marx and Mill. Co-listed as HIST and PHIL 308/508. (F, alternate years)

#### **POLS 309**

# Western Political Thought: Nietzsche to the Present

The course is an exploration of the major ideas and writers in the recent period of western political philosophy. The course covers the period from the mid-nineteenth century to the present and emphasizes the ideas of Nietzsche, Pragmatism, Freud, Ortega, Arendt, Existentialism, Phenomenology and Post-Structuralism. Co-listed as HIST and PHIL 309/509. (Sp, alternate years)

#### POLS 310 American Political Thought

The course is an examination of the history of the political ideas which have influenced American thinking about society, the state and government. The course covers material from the Puritan era through the present. Co-listed as HIST 310 (alternate years)

3 cr.

3 cr.

3 cr.

3 cr.

# POLS 311 3 cr.

American Political Parties and Elections This course will focus on political parties and the electoral process in the United States. Topics will include the history of parties and elections, campaign finance, the role of media in elections and voting behavior.(F, even numbered years)

#### POLS 312

Political Economy of Discrimination(d)

The course examines the role discrimination plays in creating economic barriers in the U.S. economy for the racially defined minorities, and women. The negative impact of discrimination towards these groups is first examined in historical context. Following that, Neoclassical, Institutionalist, and Marxian models of labor market discrimination are critically examined. In light of the historical and theoretical discussion we examine the policies proposed to eliminate discrimination. Prerequisite ECON 201 and SOCI 100. Co-listed as POLS 312. (F or Sp most years))

#### POLS 314 Women and Politics

In this course students will examine women's political movements, public policies which affect the relative status of women and men, the role of women in electoral politics and how ideas about gender have shaped political life. Our analysis will include examples from politics in the United State and also from other nations. Co-listed as Women's Studies 314.(alternate years)

#### POLS 319 Media and American Politics

This course will explore changes that have occurred in the American polity as a result of the increasingly dominant role played by the mass media in framing American politics. The course will focus on the implications of these changes for the meaning and practice of democratic politics. The course will take a broad perspective on the mass media and will include discussions of the impact of popular culture, as well as that of the news media, on American politics. Co-listed as JOUR 319.(alternate years)

# POLS 320

**Journalism and Public Opinion** The nature of public opinion, its formation and role in a democratic society will be studied. Co-listed as POLS 320. (F)

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

#### POLS 321 Political Participation

This course will examine conventional modes of political participation such as voting, running for office, participation in interest groups and less conventional modes such as demonstrations, protests, civil disobedience and revolutionary activity.(alternate years)

# POLS 322 3 cr. Politics of American Cities

This course explores the origins, growth, present condition and future direction of urban policymaking in the United States. Key actors in the process of making urban public policy and delivering local services are analyzed. In addition, current urban political problems are examined. These include such issues as poverty, housing, racial politics and national urban policy.(alternate years)

POLS 323	3 cr.
Public Personnel	

#### POLS 324 Managing Public Services

#### POLS 326 American Presidency

This course provides a critical examination of the constitutional powers and duties, influence and dynamics of the presidency. A look at the historical evolution of the office, the debate surrounding the role of the executive in both foreign and domestic affairs and concerns about the future of the presidency. (alternate years)

#### **POLS 327**

#### **Congressional Politics**

Students will study the role of Congress in the policy-making process in the national government, criticism of that role and proposals for reform of Congress. (alternate years)

#### POLS 332 Public Finance

This course examines the role of government in the economic system. Emphasis is placed on the analysis and evaluation of various government expenditure programs and the theories and structure of taxation. The effects of the various government expenditure and tax policies on the allocation of economic resources, production of goods and services, and the distribution of income and wealth are also discussed. Prerequisites: ECON 201 and 202 Co-listed as POLS 332. (F or Sp)

#### **POLS 334 Public Regulation**

This course explores government's regulation of business. Antitrust and economic regulation, safety and health regulation and protection of the environment are covered. Prerequisites: ECON 201 and 202. Co-listed as POLS 334. (Sp)

#### **POLS 335 Public Regulation of Business**

#### **POLS 344 Politics of the Developing World**

This course examines and compares the political cultures, institutions, processes and organizations of developing states, such as, but not limited to, Brazil, Egypt, India, Mexico, and Nigeria. In addition, it explores the developing world's relationship to the developed world.(alternate years)

#### **POLS 346**

#### **Politics of Western Europe**

The course examines and compares political cultures/traditions, institutions, processes, organizations of several major Western European democracies such as the U.K., France and Germany. It also investigates the political and economic interaction among these countries.(alternate years)

#### **POLS 347** Government of the USSR

#### **POLS 348**

#### **Politics of East Asia**

This course examines and compares environmental-cultural causes, current political systems, sociopolitical development of the countries in this area, such as China, Japan and Korea. In addition, it explores the collective impact of these countries on world politics(not offered on a regular basis)

#### **POLS 349**

**Middle Eastern History and Politics** An overview of significant issues of Middle

East history and politics including Islam and Islamic fundamentalism, the Ottoman presence, World War I in the Middle East, Modern State System, Arab-Israeli Conflict, petroleum and oil prices, regional wars and

instability, American and European interest in the Middle East, and position of women in Middle East societies. Co-listed as HIST 349/549. (occasionally)

#### **POLS 354** Women and the Law

The course is designed as a survey of many areas of law which have made distinctions between the sexes, including employment, family, reproduction, education and criminal justice. The focus is on legal issues concerning sex discrimination against both women and men. Prerequisite: upper class standing. Co-listed as POLS 354. (F or Sp)

#### **POLS 355 Environmental Law**

3 cr.

The course contains an overview of public and private regulations affecting the environment, including policy considerations behind environmental legislation and the resulting legislative and administrative acts which implement that policy. Regulation at the federal, state and local levels is covered. Included are consideration of the National Environmental Policy Act, Clean Air Act, Federal Water Pollution Control Act, Toxic Substances Control Act and other significant legislation. Cross-listed as POLS 355. Prerequisites: POLS 114, and BIOL 100 or 150, or consent of instructor. (F, alternate years)

**POLS 360** 3 cr. **International Relations Theory** 

#### **POLS 364**

**POLS 367** 

#### **International War and Peace**

This course explores the historical patterns of war evaluates the causes of war and examines methods that can be used to both avoid war and achieve peace(SP, alternate years)

#### **POLS 365** 3 cr. American Foreign Policy

This course surveys the postwar events, controversies, and most recent challenges in U.S. foreign policy. It also analyzes the major sources of U.S. foreign policy such as ideology, national interests, and national power. Further, it examines the pattern and process of American foreign policy making.(alternate years)

3 cr.

#### **History of United States Foreign Policy** This course presents an analysis of United States foreign policy from 1776 to the present. The emphasis is upon expansion, both continental and commercial. Co-listed as HIST 367/567. (Sp, alternate years)

#### **POLS 369**

3 cr.

3 cr.

#### **Politics of the World Economy**

This course introduces major theoretical approaches such as Regime Theory, Hegomonic Stability Theory and Dependency Theory to the international political economy. It also examines major political issues in international trade/ finance, global economic development, international organizations and global economic order. (alternate years)

#### **POLS 377 The United Nations**

1 cr.

3-6 cr.

3 cr.

This course examines the history and structure of the United Nations. It explores the key issues the organization and its member states confront, using lecture, discussions, and simulations. Each student selects a country, researches its political institutions and the international issues it faces, and represents the country before mock institutions of the United Nations. This course may be repeated for a maximum of three credits.(Sp)

#### **POLS 378**

# 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)

#### **POLS 379**

3 cr.

#### 3-12 cr. **Internship in Political Science**

The internship is designed to allow the student to gain college credit through practical work experience with political parties, interest groups, federal state or local governments, and public agencies. Prerequisites: junior status, and previous coursework in political science. Internships must be approved by the departmental chair prior to registration for the course.(F,Sp,SS)

#### **POLS 389**

0.5-3 cr.

**Special Topics in Political Science** This course is designed as an in-depth examination of a specialized aspect of political science or important area of current public policy concern. The specific issues will be designated whenever the course is offered. (not offered on a regular basis)

#### **POLS 416 Constitutional Law**

3 cr.

An examination of major Constitutional issues throughout American History. Issues addressed will include the powers of government and the rights and freedoms of individuals. Special emphasis will be placed on the role of the Supreme Court

in American politics. Prerequisites: junior standing, previous work in political science or American history. Co-listed as HIST 416/616.(alternate years)

#### POLS 428 Political Geography

This course emphasizes the technical and philosophical aspects of American political landscapes. Voting patterns; territorial political entities: local, state, national, imperial; role of the lands and seas; geopolitics; and the role of the environment and natural resources on international relations; and impacts of political entities on the landscape are explored. Prerequisite: GEOG 120 and one 200 or 300 level human geography course, or permission of the instructor. (Sp alternate years)

#### **POLS 480**

#### Seminar: Political Science

This is writing intensive course is a seminar in which students review the process of conducting political science research. Students will be exposed to current research in various fields of Political Science and will choose a topic for independent research which they will conduct with faculty guidance. The research projects will be presented to the class. Prerequisites: POLS 200 and senior standing or consent of the instructor.(F)

#### POLS 489

Special Topics in Political Science

#### **POLS 490**

**Readings in Political Science** 

The course is designed for advanced students who desire a more intensive study and exploration of the literature in an area of concern within the discipline of political science. Prerequisite: previous coursework in political science and consent of instructor prior to registration for the course.(F, Sp, SS)

#### POLS 499 Independent Study

The course allows an in-depth exploration of some problem or phenomena identified within the discipline of political science. Prerequisites: previous coursework in political science and consent of instructor prior to registration for the course.(F, Sp,

#### PSYCHOLOGY

#### **PSYC 101**

SS)

**General Psychology** 

Introductory behavioral science course which emphasizes research methods, biological basis of behavior, human development, learning, memory, social and abnormal behavior. Course is included in the Social-Behavioral Science area of the General Education program.(F, Sp)

#### PSYC 110

3 cr.

3 cr.

0.5-3 cr.

1-3 cr.

1-3 cr.

3 cr.

#### Psychology Colloquium I

This course is an introduction to the psychology major, and psychology-related disciplines and careers, with guest lectures by staff members from Psychology, the Career Center, and other campus offices. Students will begin to develop a professional portfolio, write a paper on potential psychology-related careers, and participate in departmental events and assessment activities.

#### PSYC 160 Psychology of Adjustment

This course examines contemporary research in various areas of psychology and applies them directly to the life of the student. Issues such as motivation, self-regulation, interpersonal relationships, sexuality, stress and coping behaviors are examined. Individual and group exercises intended to aid in applying course material to the student are utilized.(not offered on a yearly basis)

#### PSYC 201

Behavioral Statistics

Course provides an introduction to descriptive and inferential statistical techniques used in Behavioral/Social sciences. Topics covered include the basic concepts of levels of measurement, statistical normality and randomness; the descriptive statistical techniques of central tendency, variation and correlation and the hypothesis testing of means of proportions. Prerequsities: WPT Math Score of 40+, ACT Math Score of 20+ or Math 30 or a higher level math class. Course meets the mathematics requirement in the General Education program.(F, Sp)

#### PSYC 205 Research Methods

This is a writing intensive course. This course introduces the methods used by psychologists to perform research, including experimental and nonexperimental techniques. Special emphasis is placed on topics in statistics and experimental design (e.g., withinand between-subjects designs, factorial experiments and single-subject designs). The use of American Psychological Association writing-style to communicate research findings is also discussed. Prerequisites: PSYC 101 and 201.(F, Sp)

#### PSYC 225

1 cr.

3 cr.

3 cr.

3 cr.

# Sex Differences, Gender Roles, and Sexual Orientation

This course provides a survey of research concerning the development of psychological, physiological, and behavioral sex differences (and similarities), gender roles, and sexual orientation focusing on how these issues relate to development at the individual, applied (e.g., education and workplace), and cultural levels. (J-Term)

#### PSYC 236 3 cr. Developmental Psychology: Childhood and Adolescence

This course explores research and theory from the field of developmental psychology regarding the nature and processes of human cognitive, physical and social development from conception through adolescence. Key topics of discussion include: causes of change (genetics versus experience); prenatal development and birth; theories of cognitive development, language acquisition; moral development, and the development of the "self."(F, Sp)

#### PSYC 250 Industrial and Organizational Psychology

This course examines the work-a-day problems in personnel, organizational and engineering psychology as applied to business. Topics covered include personnel selection, placement, training, the structure of organizations, leadership, management theory and the design of information displays, atmospherics and illumination in the work area.(Sp)

#### PSYC 260

#### **Behavior Modification**

This course examines the principles of behavior analysis and the techniques of behavior change. The latter include shaping, contingency management, prompting and counter-conditioning. The application of behavioral principles in various environments is discussed, as well as self-change methods. Prerequisite: PSYC 101.(F)

# PSYC 265

**Social Psychology** The purpose of this course is to introduce the student to the field of social psychology within the discipline of psychology including an examination of the individual's behavior within a variety of social contexts. Topics include social perception, influence, attitudes, attitude change, aggression, prejudice and racism. Prerequisites: PSYC 101 or SOCI 100 or consent of instructor.(F, Sp)

3 cr.

3 cr.

3 cr.

#### **PSYC 279** 1 cr. **Cooperative Education and Internship I**

#### **PSYC 285**

# Psychology of Prejudice and Racism (d)

This course will examine contemporary psychological perspectives in the study of prejudice and racism. Specifically, we will briefly examine the history of racist and prejudiced thought in American society and current psychological theories of racism and prejudice In meeting these objectives we will focus on a variety of racial/ethnic groups including African Americans, Asian Americans, Latinos, Native Americans, and White American. Prerequisites: PSYC 101. (Sp)

**PSYC 289** 0.5-3 cr. Special Topics in Psychology

#### **PSYC 305**

#### Learning and Motivation

This course is designed to acquaint students with findings, principles and theories in the field of animal learning. Emphasis is placed on classical conditioning, instrumental learning and, to a lesser degree, social learning theory. Selected topics within the field of motivation are also included in the course. Prerequisite: PSYC 101.(F, Sp)

#### **PSYC 310**

Memory and Thinking

This course provides an introduction to the theories, research and applications of the field of cognitive psychology. Major topics of study include the processes of attention, pattern recognition, memory, language, decision making and problem solving. These topics are presented within an information-processing framework, but a connectionist approach to cognition will be introduced as well. Prerequisite: PSYC 101.(F, Sp)

#### **PSYC 315**

#### **Psychological Measurement and Evaluation**

Course examines the current social, legal and psychometric concerns in psychological-educational measurement. Topics include history of measurement, legaland ethical issues, construction and analysis of tests, interpretation of scores and the technical considerations of reliability and validity. Prerequisite: PSYC 101. (F,Sp)

# **PSYC 320**

**Psychology of Personality** The course involves the investigation of

the study of personality. Topics include: psychoanalytic, trait, phenomenological, behavioristic and social learning approaches to personality. Consideration of a variety of perspectives on personality. Prerequisites: PSYC 101 or consent of instructor.(Sp)

#### **PSYC 325**

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

#### Abnormal Psychology

This course focuses on the description, etiology, and treatment of mental disorders. Diagnosis, assessment, methodology, and legal and historical issues concerning abnormal behavior are addressed. Prerequisite: PSYC 101.(F, SP)

#### **PSYC 330 Exceptional Child**

This is a survey course examining the general aspects of the exceptional child. Emphasis centers on the historical and legislative issues, definitions, eligibility criteria, and characteristics of exceptional individuals; models for delivery of services; individualized education programs; and examples of accommodative techniques in the classroom and home. Field experience (to fulfill human relations hours) is required for all education majors in the course. Prerequisite: Junior standing.(F, Sp, SS)

# **PSYC 333**

# **Integration of the Exceptional Child**

This course emphasizes the role of the classroom teacher in collaboration with special educators, parents, and community resources. Federal and state guidelines for professional roles and program options for exceptional learners will be reviewed. Course content includes intervention strategies for reading, written expression, mathematics, social-behavioral, and study skills for the general educator with students, parents and other professionals within the school and community. Prerequisite: PSYC 330.(Sp)

#### **PSYC 336** 3 cr. **Developmental Psychology: Adulthood** and Aging

This course explores research and theory regarding the nature and processes of human development from early adulthood through old age and death. Key topics include biological theories of aging; the changing body; disorders of the brain; personality development; changing memory and thinking skills; relationship issues, careers and retirement, and death/ dying.(Sp)

#### **PSYC 340 Animal Behavior**

This course examines several approaches to the study of animal behavior including ethology, comparative psychology and sociobiology. The course also examines the methods used to collect data and surveys the contribution of developmental, social, ecological and evolutionary

processes to animal behavior. Students will independently observe naturally occurring behavior and analyze their observations. Prerequisite: PSYC 101.(Sp)

#### **PSYC 345** 3 cr. Human PsychoBiology

#### **PSYC 350**

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

#### **Sensation and Perception**

Students will gain an understanding of the basic physiological and psychophysical methods used in perception research. This knowledge will then be applied to study how the senses of vision, audition, taste, smell and touch extract and code information from the environment. Special emphasis will be given to the visual mechanisms involved in the perception of contrast, form, depth, size, motion and color. Prerequisite: PSYC 101.(Sp)

#### **PSYC 355**

# Physiological Psychology

This course is designed to familiarize students with the anatomical, chemical, physiological and hormonal control of behavioral processes such as sensation and perception, consciousness, emotionality, eating, drinking, thermo regulation, aggression, reproduction, learning, memory and higher cognitive processes. Prerequisite: PSYC 101.(F, Sp)

#### **PSYC 361**

#### 3 cr. **Psychological Foundations of Employee** Selection

This course provides a broad overview of the psychological and psychosocial aspects of the employee selection process. Sample topics include the psychology of recruitment; selection tests, interviews, and other assessments; psychological and legal fairness in selection; and statistically evaluating the effectiveness of selection. Prerequisites: PSYC 250 or MNGT 320. (Sp odd years only).

#### **PSYC 362**

#### 3 cr. **Psychological Foundations of Employee** Training

This course provides students a broad overview of the psychological aspects of the employee training process. Sample topics include the psychology of the learning environment; instructional approaches and training delivery; statistical evaluation of training effectiveness; and special issue including the psychology of team training, diversity training, and e-Learning. Prerequisites: PSYC 250or MNGT 320. (Offered Sp even years only)

#### **PSYC 365**

3 cr.

3 cr.

**Individual and Group Processes** 

PSYC 375

3 cr.

3-6 cr.

1-3 cr.

0.5-3 cr.

3 cr.

3 cr.

3 cr.

The Psychology of Human Sexuality This course provides students a broad understanding of psychological aspects of human sexuality. Topics include love and attraction, arousal, gender roles and cultural norms, and diversity in sexuality. The course should increase the students' confidence and ability to seek sexual information and communicate with others about this important topic. Prerequisites: PSYC 101 or instructor consent. (SS)

#### **PSYC 378**

Semester Abroad Research

This program combines the most significant aspects of foreign travel and research into a meaningful and educational experience. Prerequisites: participation in INTS 377/577 Semester Abroad Foreign Study Seminars, junior standing and 2.25 GPA.(F, Sp)

#### PSYC 379 Internship

This internship program places selected students in human service agencies, businesses, industries, or organizations to provide opportunities to apply their knowledge of psychology. The Internship site must be approved in advance of the work experience by the psychology department. The intern's duties and responsibilities will be tailored to the needs of the sponsoring organization and the background of the student. Prerequisites: 60 semester hour credits (at least 20 credits in psychology), 2.5 G.PA., and consent of department internship supervisor.

PSYC 389 Special Topics in Psychology

#### PSYC 401

#### **History and Systems**

The ideas and concepts involved in the historical development of the discipline of psychology are studied. Examination of various trends, both historical and recent, are included. Prerequisites: PSYC 101, 201, 205 and second semester junior standing. Majors only.(F, Sp)

#### PSYC 405

#### Advanced Research Methods

#### PSYC 410

Introduction to Counseling

This course is designed to familiarize students with an overview of the field of counseling and with the basic concepts and skills associated with school and community settings. There will be a shared emphasis on experiential activities, theories and research in counseling. Prerequisite: junior, senior or graduate standing. Co-

#### listed as COUN 410/610.(F,Sp)

#### PSYC 420

**Introduction to Learning Disabilities** This course is presented as an introductory or survey course in the field of learning disabilities. It will provide a brief examination of a number of topics including major theoretical approaches, current definitions and terminology used in learning disabilities, issues in diagnosis and assessment, educational adaptations, and techniques and strategies appropriate for use in a regular classroom are emphasized. Field experience is required. Prerequisites: PSYC 330 and senior or graduate standing.(F)

3 cr.

3 cr.

3 cr.

3 cr.

1-3 cr.

#### PSYC 421 Mental Retardation

This course is an introductory course of the developmental disability of mental retardation. The definition and characteristics of the learner with mental retardation is examined as well as the issues of normalization, individual rights, assessment, family issues and transition from school to community life. Field experience which can be used to meet Human Relations requirements (for Education majors) is a requirement of the course. Prerequisite: PSYC 330.

#### PSYC 422 3 cr. Emotional and Behavioral Problems

#### PSYC 423 The Gifted Child

This course serves as a survey of the field of education for school aged high potential students. A variety of gifted education topics is explored including the historical development of services, definitions and identification, program options, teaching strategies, creativity, and critical thinking. Field experience which can be used to meet Human Relations requirements (for Education majors) is a requirement of the course. Prerequisite: PSYC 330.

#### **PSYC 425**

**Introduction to Clinical Psychology** The course serves as an introduction to the field of clinical psychology as a science and profession. Included is a consideration of history, training, issues and problems associated with the profession. In-depth analyses of clinical assessment, psychotherapies, community psychology and therapeutic outcome studies are presented. Prerequisite: PSYC 101.(Sp)

#### PSYC 470 Field Experience

The course is an arranged field experience where academic training in psychology can be applied to a specific setting of interest to individual students. The experience is supervised by both a department faculty member and a cooperating on-site supervisor. Limited enrollment. Prerequisites: junior or senior standing and consent of instructor.(F, Sp)

1-3 cr.

#### PSYC 480 Seminar

Students will review and present selected topics in psychology. Prerequisites: junior or senior standing and consent of instructor.(not offered on a yearly basis)

PSYC 489	0.5-3 cr.
Special Topics in Psychology	

#### PSYC 490 1-3 cr. Independent Study

This course is designed for students who desire intensive study of the literature of selected subjects in psychology or development of a project in psychology. Limited enrollment. Prerequisites: junior or senior standing, major or minor in psychology and consent of instructor.(F, Sp)

#### READING

<b>READ 389</b>	0.5-3 cr.
Special Topics in Reading	

# SPEECH COMMUNICATIONS HONORS

SCHO 288	1 cr.
Honors Seminar	

#### SUMMER CONSORTIUM

SCON 300	12 cr.
Summer Consortium	

#### SPEECH COMMUNICATION AND THEATRE ARTS

# SCTA 1013 cr.Fundamentals of Oral CommunicationThe course offers communicationexperiences intended to improve students'speaking and listening skills across abroad spectrum of situations includingmulticultural interactions, public

multicultural interactions, public communication, small group interaction, interpersonal communication, and interviewing.

# SCTA 105 3 cr.

**Introduction to Theatre and Drama** Students will study the values of theatre art in general culture, with an analytical consideration of the various elements of drama, the elements of physical contemporary theatre, and a brief historical survey to give perspective and understanding to today's theatre-goer. An optional practical component offers students the opportunity to work on a university theatre production.(F, Sp)

#### **SCTA 106**

#### **Interpersonal Communication**

Students will study the stages of relationship development and deterioration. They will study the effects of trust, openness, empathy, and self-disclosure on interpersonal communication and will also learn how to manage conflicts and how males/females communicate differently.(F,Sp)

#### **SCTA 116**

#### 3 cr. **Business and Prof Communication**

Students will examine those forms and types of speech typically used in the career setting: for example, a sales speech, interview, or presentation. Special attention will be given to the forms of career messages and media for communication, including visual aids.(F,Sp)

#### **SCTA 121**

**Acting I: Basic Techniques** Students will learn the fundamentals of acting through improvisation, scene study,

and performance. Topics such as character analysis, basic stage movement and voice techniques will be covered. The course includes both theory and practice.(F)

#### **SCTA 131 Design for Theatre**

Students will study the theory and practice of the basic elements and techniques used in theatrical design. These elements include script analysis, research, and conceptual development and then application of the techniques of drawing, figure drawing, drafting, and color theory. Art and makeup materials are required.(Sp)

#### **SCTA 151**

#### **Broadcast Performance I**

The course investigates the adaptation of the forms of speech to the broadcast media. Emphasis is placed on various radio/ television performance skills.(F)

#### **SCTA 160**

**Television Studio Production** The student will learn and perform all functions within the television studio, including directing, switching, audio, graphics, camera and related functions. Television writing techniques and formats, elementary engineering terminology and theory will be discussed. The role and function of each member of the production team will be discussed. Each student will write, direct and produce his/her own video production. Prerequisite: JOUR 101. Colisted as SCTA 160.(F)

# **SCTA 171**

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

**Summer Theatre Apprenticeship** An intensive six week (2 credits) to eight week (3 credits) workshop in theatre arts designed especially for eligible high school students or entering freshmen with a strong interest in theatre. Participants will have an opportunity to take advantage of the laboratory provided by St. Croix Valley Summer Theatre. Prerequisite: consent of instructor. Course will be offered on a pass/fail basis.(SS)

#### **SCTA 200** Introduction to Film Studies

This course is an introduction to film language, art, style, technology, and analysis. It provides an historical overview and background on film theory. Students will view and critique films showing a variety of styles and techniques. Co-listed as FILM 200. (F)

#### **SCTA 206** 3 cr. **Family Communication**

The course will help the students to understand how communication develops, maintains, enhances, and/or destroys family relations. Students will study sex differences in communication; problems of single parenting and dual careers; traditional roles and changing roles within the family; and sex differences in intimacy, power, and decision making. Prerequisite: SCTA 106 or consent of instructor. Colisted as WMST 206.(Sp, alternate years)

#### **SCTA 207** Listening Skills

**SCTA 208** 

This course will allow students to observe the importance of listening in their daily lives and recognize their strengths and weaknesses as listeners. The course will develop an understanding of listening as a language art and as a communication skill. Skill development will be emphasized. Students will not be allowed to take both SCTA 207 and 407/607.(F, Sp, SS)

3 cr.

3 cr.

3 cr.

#### **Problem Solving in Small Group** Communication

The theory and practice of small group communication emphasizing leader and participant skills in task accomplishment (e.g., setting agendas, critically processing information) and interpersonal effectiveness (e.g., establishing roles, managing conflict) will be examined.(F, Sp)

#### **SCTA 211 Public Speaking**

The public speaking course is a performance class that will include giving several speeches aimed at different objectives in a variety of settings. It will include the study of speeches given by

others locally, nationally, and historically. Basic concepts of speaking will be studied.(F)

#### **SCTA 216**

2-3 cr.

3 cr.

#### **Communication in the Interview**

The course focuses on skills necessary to interviewer and respondent to maximize interview information quality and participant satisfaction. Topics include planning, conducting, and evaluating several different types of interviews: information gathering, journalistic, broadcast, counseling, selection, appraisal, persuasive/negotiation, and survey.(F)

#### **SCTA 221**

#### Acting II: Characterization

This is an advanced acting course in which participants will pursue work in characterization and scene study, and they will apply these skills to both contemporary and period plays. Prerequisites: SCTA 121.(Sp,alternate years)

#### **SCTA 222**

#### **Voice and Articulation**

The course is designed as an introduction to the elements of voice production focused on helping the individual develop a clear and articulate speaking voice. It includes an examination of the International Phonetic Alphabet and dialect work.(F, alternate years)

#### **SCTA 223**

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

**Oral Interpretation of Literature** Theory and practice in the oral interpretation of literature will be studied, including oral interpretation of prose, poetry, and drama both in individual and group readings.(Sp)

#### **SCTA 225**

#### **Musical Theatre Performance**

A performance course in which participants will pursue work in acting, vocal and movement techniques appropriate for the musical theatre. Skills in script/score analysis, approaches to acting and staging for the musical, and basic movements skills appropriate to performing in musicals will be developed. In addition students will examine and develop musical theatre auditioning skills. This course must be taken concurrently with MUS 225 - Voice for the Actor.(Sp, alternate years)

# **SCTA 230**

Playwrights of Color (d) The course will examine the theatrical works of playwrights of color; consider the aesthetic traditions that produce them, explore social factors reflected in these plays, and examine the individuals and institutions that produce such work. (Sp, Annually).

#### **SCTA 231**

**Stage Technology and Scene Painting** 

The course is a basic technical theatre class with emphasis on scenery and scene painting. Topic areas include the physical theatre and its equipment, types of scenery and properties and their construction, types of painting techniques, and an introduction to scenery/properties design theory and practice.(F,alternate years)

#### **SCTA 232**

Makeup for Theatre, Film and Video

This course includes theory and extensive practice in the skill of makeup application for roles in all media. Makeup kit is required. Prerequisite: SCTA 131, Design for the Theatre or consent of instructor. Colisted as FILM 232. (Sp, alternate years)

#### **SCTA 234 Stage Management**

This course is designed to introduce students to the processes and skills necessary to become an effective stage manager for a theatre production. The

students will investigate the various tasks assigned to a stage manager. In a classroom situation the students will be assigned to demonstrate proficiency with assigned stage management activities.

#### **SCTA 248**

#### **Cultures in Conflict**

This course focuses on film as a medium which examines conflicts resulting from cultural differences. At the center of good narrative film structure is conflict. This conflict will be explored through the film's language content and persuasive qualities, as well as how it provokes audience reactions. Co-listed as FILM 248. (SP, alternate years)

#### **SCTA 260**

**Electronic Field Production** 

Students will examine, understand and perform procedures, policies and practices applied to television field production. Students acquire skills and knowledge in all areas of EFP for television including pre-production tasks, lighting and shooting in the field, and editing. Students will learn the theory and practice of directing/writing, producing commercials, public service announcements (PSA) and infomercials. Co-listed as SCTA 260. (Sp)

#### **SCTA 261**

#### **Electronic Media Copy Writing**

This class will examine the theory and skills involved with writing techniques for commercials, public service announcements (PSA) and infomercials for adio and television, as well as nonmedia applications such as corporate video. Students will learn and apply principles of persuasion toward the writing of continuity programming. Techniques for needs assessment of clients as well as market and product reasearch will be discussed. Colisted as SCTA 261. (Sp)

#### **SCTA 270** 1 cr. Leadership/Parlimentary Procedure

An intensive four week (1 credit)

to eight week (3 credits) laboratory

experience in theatre arts performance,

design, and/or production techniques.

Students will participate as members

of the university summer stock theatre

acting, theatrical design, construction,

management, and/or sales activities.

Prerequisite: Consent of instructor.

communication (including business

communication, mass communication and

theatre), overviews the major branches

of, and overarching theories relevant to,

communication and theatre scholarship.

relevant scholarly resources and methods

culminating in a written paper or project

**Career Development: Theatre Arts** 

This course provides an opportunity to

become familiar with the types and variety

of opportunities for employment available

in theatre arts. Participants will develop a

Students will become familiar with

these disciplines. It introduces students to

operation in preassigned duties including

**SCTA 271 Summer Theatre** 

**SCTA 279** 

**SCTA 284** 

report.(Sp)

**SCTA 288** 

Sophomore Seminar

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

1-3 cr.

#### **SCTA 303 Documentary Production**

**SCTA 301** 

**History of Film** 

An examination of the principles and techniques used in creating political, educational and social commentary documentaries. Emphasizes the skills needed to research, write, and produce a TV or radio documentary from concept to finished product focusing on research, preproduction planning, and shooting/ recording, editing and presentation. Prerequisite: Jour 121 or 122 or Film 260 or SCTA 260. Co listed as FILM 303 and

Students will analyze factors which have significant influence in the total communication process, e.g., the influence of environmental factors, the effects of physical behavior, the effects of vocal cues which accompany spoken words, and the various methods of observing and recording nonverbal communication. Prerequisite: SCTA 284 or consent of instructor.(F,Sp)

#### **SCTA 310** 3 cr. Media Literacy: A Weapon Against Propaganda

Students will view multiple examples of entertainment programming, such as theatrical and made-for-TV movies, sitcoms, radio and internet, to analyze the intended messages, how the media technology and script were used to communicate the messages and the intended market for the program. This class will not include specific discussion of news and advertising.(Sp,even numbered years)

#### **SCTA 311** Persuasion

Students will study variables in communication settings which influence the nature and effects of oral response. Prerequisite: SCTA 101 or consent of instructor.(F, Sp)

#### **SCTA 312** 3 cr. **Argumentation and Decision Making**

The course presents opportunities for comparison of decision-making systems with application through a variety of written and oral assignments. Emphasis is

#### 3 cr.

3 cr.

3 cr.

3 cr.

SCTA 301 is a survey of film history from its origins to today. The course will cover the major periods in film history by examining its innovators, major narrative forms, and major theories. The course will also look at the film industry and international influences. Co-listed as ENGL, FILM, HIST, JOUR 301.(Sp)

1 cr. **Cooperative Education and Internship** SCTA 303. 3 cr. **SCTA 306 Non-Verbal Communication** The course, designed for majors in speech

arts.(F, alternate years) **SCTA 289** 

0.5-3 cr.

resume, and either a portfolio, or audition pieces. Prerequisite: 6 credits of theatre

1 cr.

**Special Topics in Speech** 

#### **SCTA 294**

#### 3 cr. Sophomore Seminar: Drama Theory and **Theatre Research**

Students will read and discuss theories regarding the meaning and making of theatre. As they consider these theories, they will learn to research and write about the theatre, produce small theatre pieces, and evolve a personal theory about the purpose of theatre. (Sp)

placed on the ability to research and define the quality of evidence and supporting materials used within arguments. (F)

#### SCTA 313

#### Intercultural Communication

The course will present principles and skills governing effective communication among people from different cultures. Special problems occurring in business contexts will be addressed.(F)

#### SCTA 314

#### Introduction to Criticism

This course includes a survey of the nature and theories of criticism as applied to communication arts. Practice in criticism of speech communication, mass communication, or theatre will be required.(Sp,alternate years)

#### SCTA 316

#### Organizational Communication

The course is an examination of communication in the organizational setting, including the study of networks, roles, and strategies. Students will learn the basic steps in a communication audit and techniques for improving organizational communication. Prerequisite: SCTA 284 or consent of instructor.(F,Sp)

#### **SCTA 318**

#### Communication and Leadership

The course integrates contemporary leadership theories with oral communication knowledge and skills. Students will develop a personal leadership communication profile and will have opportunities to practice effective leadership communication in a variety of contexts.(Sp,alternate years)

#### SCTA 319

#### Freedom to Speak

Beginning with a review of the philosophical, legal, Constitutional, and social bases for the free speech tradition in the United States, students will focus upon the development and evolution of this tradition to the present day. Landmark Supreme Court decisions and their varied interpretations, as well as changing societal attitudes and technological developments, will be included.(Sp, alternate years)

#### SCTA 323 Arts Management

This course is an analysis of many areas of the performing arts (theatre, music, dance) and the variety of methods used to promote, stage-manage, and maintain or build performing arts organizations.(F, every third year)

#### SCTA 327

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

#### **Children's Theatre and Puppetry**

This is a studio course in which those enrolled are involved with both the practice and theory of children's theatre and puppetry; theory is given through lectures and reading assignments, practice through participation in producing and staging a studio production.(F, alternate years)

#### SCTA 328 3 cr. Creative Dramatics for Children and Special Populations

Students will study the educational principles underlying work in creative dramatics and demonstration with children and special populations.(Sp,alternate years)

SCTA 329 3 cr. Play Production in Secondary School

#### SCTA 331 Fear of Speaking

This course discusses development of speech fear as well as preventative and therapeutic strategies. It is intended for students afraid to speak or interested in providing treatment for speech fear. Also listed as SCTA 331/531 and 331/531.(F,Sp)

# SCTA 332

#### **Stage Costuming** Students will study costuming as an art

and craft for theatre, dance and puppetry. Practical experience in design and construction is included. Basic pattern development and machine sewing is included.(Sp, alternate years)

#### SCTA 333 Stage Lighting

This course is a basic introduction to the theory and techniques of stage lighting. The student should develop a fundamental knowledge of electricity, lighting instruments, safe and proper hanging practice, and color selection. The student should also acquire a vocabulary of theatre terminology.(F, alternate years)

#### SCTA 334 Playwriting

The techniques in playwriting are examined and applied. Attention will be given to theories in dramatic construction and application of theories in creation of a one-act play. Emphasis will be placed on dramatic structure, writing believable dialogue, character creation, scenario development, and technical skills necessary to producing a finished script. Prerequisite: Freshman English sequence or consent of instructor.(Sp)

#### SCTA 335 Directing I

3 cr.

This course is an introduction to the theory and practice of stage direction. Topics covered will include principles of blocking, script analysis, and working with actors. Students will direct a one-act play as well as participate in class exercises. Prerequisite: 1 of theatre arts or consent of instructor.(Sp,alternate years)

# SCTA 336

Costume and Fashion

This is a historical survey of clothing from the Egyptians to modern, exploring clothing as a reflection of or response to society.(F, every third year)

#### SCTA 337 History of The

3 cr.

3 cr.

# History of Theatre and Dramatic Literature

Students will study dramatic literature, critical theory, and staging techniques of theatre from its origins through the Renaissance.(F,every third year)

#### SCTA 338

#### 3 cr.

#### **History of Theatre and Dramatic Literature: 18th Century to Present** Students will study dramatic literature and theatrical practices from the 18th century to the present.(F,every third year)

#### SCTA 339 American Theatre

3 cr.

The course is an exploration of the literature and practice of theatre in America from the 17th century to the present. Participants will examine popular culture and literary works by major American playwrights and learn about the culture reflected on the stage.(F, every third year)

#### **SCTA 340**

**SCTA 351** 

3 cr.

#### Gender, Race, Ethnicity and Class in Media

Through readings, lectures, discussions, videos, internet activity and media examples, we will analyze assumptions the media propagates about the genders, different races and social classes. Through discussion of relevant theories the potential effects of media programming dealing with women, different races, and social classes will be analyzed and predicted.(F, odd numbered years)

# SCTA 348

Techniques of Cinematography Workshop

#### 3 cr.

3 cr.

**Broadcast Performance II** Advanced application of the forms of speech to the broadcast media will be

3 cr.

3 cr.

3 cr.

3 cr.

examined, with emphasis on on-camera and off-camera television performance. Prerequisite: SCTA 151.(occasionally)

#### **SCTA 353**

3 cr.

Mass Media and Popular Culture This course surveys the major theories and methods of criticism in the study of popular culture, with particular focus on mass communication studies from the 1940s to the most recent developments. A variety of popular cultural forms will be analyzed in class (e.g. music television, film, sitcoms, soap operas, current affairs programs).(F, alternate years)

#### **SCTA 360**

#### 3 cr. **Corporate Electronic Communication**

The course will examine the actual techniques used to create effective corporate videos and infomercials. All elements of pre-production, production, and post-production will be discussed and then performed by students. Discussions of current trends of teleconferencing and satellite communication will be included. Non-linear video editing will be discussed and explained. Prerequisite: SCTA 260. Co-listed as FILM 360. (F, odd numbered years)

#### SCTA 370

#### **Intercollegiate Debate**

Students will research and analyze the year's national debate topic and obtain training and practice in argumentation skills. Competition in intercollegiate tournaments will be included. May be taken for only 1 credit per term, total of 2 credits. Prerequisite: consent of instructor.(F, Sp)

#### **SCTA 371**

#### **Intercollegiate Forensics**

Students will prepare speeches and/or oral readings for presentation in intercollegiate competition. May be taken for only 1 credit per term, total of 2 credits. Prerequisite: consent of instructor.(F, Sp)

#### **SCTA 375**

#### **Theatre Practicum: Production**

Students will acquire directed, supervised experience in theatre arts emphasizing the creative or research aspects of theatre performance or stage directing. May be retaken once.(F, Sp)

#### **SCTA 376**

#### Theatre Practicum: Design and Technology

Directed laboratory/production experience in theatre design and technology is the goal of the course. It usually involves participation in a theatrical production. Prerequisite: consent of instructor. May be retaken once.(F,Sp)

#### **SCTA 377 Mass Communication Practicum**

This is a directed studio experience in mass communication emphasizing the creative or research aspects of mass communication. May be retaken once. Prerequisite: consent of instructor.(F, Sp)

#### **SCTA 378** 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)

#### **SCTA 379** 3-12 cr. **Internship in Speech Communication** and Theatre Arts

The Speech Communication and Theatre Arts internship is a program which places selected students in businesses, industries, or organizations to provide opportunities to practically apply their knowledge of and skill in speech, mass media, or theatre arts. Students may elect a 3-12 credit internship. This experience will be evaluated on a PASS/FAIL basis. Prerequisite: Junior or higher standing and permission of SCTA internship supervisor. Students may count a total of 12 internship credits toward their degrees.(F, Sp, SS)

#### **SCTA 389 Special Topics in Speech**

1 cr.

1 cr.

1 cr.

1 cr.

0.5-3 cr.

3 cr.

3 cr.

#### Students will conduct and in-depth investigation of various areas of speech communication, mass communication, or theatre. Topic areas could include movement studies, periods of public address, programming for cable television, costume history, or other areas of student interest. (on request)

#### **SCTA 403**

#### **Directing the Secondary School Forensics Program**

The course is an examination of philosophies for educational programs in forensics at the secondary school level. Special emphasis will be directed to training students and administering a forensics program.(on request)

#### **SCTA 407 Listening Instruction**

This class is offered as an alternative to Listening (SCTA 207), a listening skills class for undergraduates. It gives prospective teachers an opportunity to observe and participate in such a course, but unlike the skills course it emphasizes techniques and units for listening instruction. Open only to prospective

and current teachers. Students will not be allowed to take both SCTA 207 and 407/607.(F, Sp, SS)

#### **SCTA 414**

1 cr.

6 cr.

#### Speech in History

Students will participate in an analytical review of the contributions of major rhetorical figures, both practitioners and theoreticians, during important historical periods. Beginning with the works of rhetoricians in classical Greece and Rome, the course will include medieval English and Continental figures and will conclude with a consideration of contemporary rhetoricians.(Sp, every 3rd year)

#### **SCTA 416 Communication Training and Development in Organizations**

This course will provide an overview of the training and human resource development field in the context of improving organizational communication. Students will learn theories, concepts, and skills undergirding needs assessment, program design and evaluation, and training and development methods. Prerequisite: SCTA 316 or consent of instructor.(Sp)

#### **SCTA 431**

**Creative Design for School Theatres** Creative Design for School Theatres is designed to give K-12 theatre teachers expertise in creative design strategies in the areas of scenery, costume, lighting and props. The course will also include planning, problem solving, technology, and survival skills.(SS)

#### **SCTA 432** 3 cr. **Computer Aided Theatrical Design** This course is an introduction to concepts of computer aided technology that are used

for theatre and entertainment design. The course will move quickly from rudimentary graphic layout to advanced 2d and 3d design creation. Prerequisites: Junior or higher and SCTA 131. (F)

#### **SCTA 435 Directing II**

This course is a study in the theories of directing and theatricality which culminates in the presentation of an experimental theatre piece for an audience. Prerequisites: 15 cr. of theatre arts, including Directing I, or consent of instructor.(F, every fourth year)

#### **SCTA 440** 3 cr. **Gender Communication**

The emphasis of this course is on similarities and differences in the communicative behaviors of women and men. The class will address such topics as female-male roles and stereotypes;

#### 3 cr.

3 cr.

3 cr.

differences in female-male verbal and nonverbal codes; partnership styles and alternatives; specific communication skills aimed at female-male relationships in a variety of settings; and special problem areas in female-male communication. Prerequisite: SCTA 284 or consent of instructor. Co-Listed as WMST 440.(Sp)

3 cr.

3 cr.

1 cr.

1 cr.

#### **SCTA 448**

**Teaching Film in the Secondary School** This course focuses on the teaching of film in the Language Arts curriculum. Film language, artistic form, narrative structure, and communication structure will be used as a foundation for the analysis of films. The course will explore film theory, film genres, film types, social values and ethics, and the relationship between film and culture. The course will require students to create a curriculum project. Co-listed as FILM and SCTA 448/648. (SS)

#### **SCTA 458**

**Broadcast Prog and Critic** 

The course is designed as an analysis of the American system of broadcasting including the evolution of both radio and television broadcast programming through history, as well as a look at current and potential trends in programming strategies and evaluation tools.(Sp, odd numbered years)

SCTA 471	2 cr.
BackStage London	
SCTA 481	12-12 cr.
Wisconsin in Scotland	

# **SCTA 484**

**Senior Portfolio** 

This is a workshop class for graduating seniors which includes resume and job search preparation in addition to the compilation of a graduation portfolio. SCTA 484 is required for all majors in SCTA. This course will be graded on a satisfactory/unsatisfactory basis. Must be completed during the semester of graduation, except for summer graduates who must complete the course in the spring semester prior to graduation.(F, Sp)

#### **SCTA 489**

Seminar: Speech Communication and **Theatre Arts** 

#### **SCTA 499** 1-3 cr. Independent Study/Research

A given subject in speech communication, mass communication, and/or theatre arts will be pursued in-depth. Prerequisite: consent of instructor and department chair.(F, Sp)

#### SAFETY EDUCATION

#### **SFED 200** First Aid and Basic Life Support

A study of emergency medical procedures and cardiopulmonary resuscitation as applied in the classroom and daily living. This course will provide certification with American Red Cross in first aid basics.(F, SP)

**SFED 201** 2 cr. **First Aid for Elementary Teachers** 

#### **SFED 214** 1 cr. Life Support and CPR Adult, child, and infant CPR according

to American Red Cross. Upon successful completion the student will be certified.

**SFED 289** 0.5-3 cr. Seminar: Safety and First Aid

**SFED 330** 2 cr. Safety in the Home, School and **Community: Promotion and Planning** 

A practical approach to the planning and promotion of safety education as a desired way of life as it applies to the home, school and community. A close look at the natural instincts of self-protection and how one can develop, improve, and maintain skills, habits and attitudes that will promote safety in one's life.

#### SOCIOLOGY

#### **SOCI 100** Introduction to Sociology

This course is designed as an introduction to the scientific study of the structure of human societies and the relationships of individuals in society. Basic concepts are discussed and representative sociological topic areas are presented.(F,Sp)

#### **SOCI 200 Sociological Inquiry**

Examines the basic techniques of sociological inquiry and explores career

options in sociology. The emphasis is on providing sociology majors and minors an introduction to modern sociological theories and techniques of research design such as literature review, sampling, data collection, etc. Prerequisite: SOCI 100 or ANTH 100, and departmental major/ minor.(F,Sp)

#### **SOCI 205**

#### **Culture and Personality**

This course addresses questions of human psychology across cultures. The role of culture in forming character is examined. Cross-cultural studies reveal the relationships between culture and child development, mental illness, styles of emotional expression, and other elements of personality. Prerequisites: SOCI 100 or ANTH 100. (Every two to three years)

3 cr.

3 cr.

3 cr.

3 cr.

#### **SOCI 208**

2 cr.

#### Sociology of Diversity (d)

This course introduces students to the diversity of North American society and to the ways in which diversity is socially and culturally constructed and maintained. The course offers components on Native Americans, African-Americans, Hispanic-Americans, Asian-Americans, religious minorities, and women, exploring the history and diversity within each group and the relations among them. Prerequisite: SOCI 100 or ANTH 100, or consent of instructor. (Yearly)

#### **SOCI 211**

#### **International Children**

This course covers the status of children and adolescents across the world, contrasting various societies in industrial and developing regions, including indigenous populations. Major topics covered are children and poverty, the health and disease status of children and adolescents, children in war, including cultural definitions of children's rights. Colisted as ANTH 211. Prerequisite SOCI 100 or ANTH 100 or GEOG 120. (F, Sp)

#### **SOCI 218**

#### **Deviant Behavior**

A sociological and social psychological examination of theories of deviance and social control in American society: the course examines a variety of specific behaviors relative to changing definitions of deviance and the development of competing theoretical paradigms in the study of deviance. Prerequisite: SOCI 100 or ANTH 100. (Yearly)

#### **SOCI 221**

#### **Global Perspectives on Women**

This course covers the social, political, and health status of women across the world and examines the cultural and social structural forces which influence these positions. Topics emphasized are the global exploitation of women and girls, reproductive health and disease, literacy and education, survival sex, rape, infibulation, poverty, war, women in government, work, households, and the military. Co-listed as ANTH/WMST 221. Prerequisite: SOCI 100 or ANTH 100 or WMST 200.

#### **SOCI 225** Race and Ethnicity (d)

#### 3 cr.

A study of the interaction of ethnic, racial, and national groups with emphasis on American society. International cases are

3 cr.

3 cr.

also studied. Prerequisite: SOCI 100 or ANTH 100.

#### SOCI 227 Religous Groups and Cults

An analysis of the nature and role of religion in contemporary society. The formation of religious organizations such as denominations, sects, and cults are examined. Consideration is also given to the content of specific religious groups such as the Amish, Hutterities, Mormons, Unification Church, etc. Prerequisite: SOCI 100 or ANTH 100 or consent of instructor.(SP)

#### SOCI 228 Native American Culture

This course is an introduction to the anthropology of Native American cultures. It includes study of several American Indian cultures in different regions of North America. The course emphasizes the diversity of cultures among Native Americans, in the past as well as the present. Prerequisite: SOCI 100 or ANTH 100.

#### SOCI 230

Sociology of Sport and Leisure

The course provides an analysis of sport and leisure in the United States from the standpoint of its socioeconomic impact and relevance, contemporary social organization, social psychological processes, and issues such as violence, inequality, sports and education, and social values. Prerequisites: SOCI 100, PSYC 101, or consent of instructor.

#### **SOCI 240**

**Contemporary Social Problems** 

This is a survey course which applies methods of sociological analysis to a variety of social problems in the United States and the world today: poverty, race, and ethnic relations, work and the labor force, population and ecology, crime, deviance, health care, the family, sex roles, drug and alcohol abuse, etc. Prerequisite: SOCI 100, ANTH 100, or consent of instructor.(Yearly)

#### **SOCI 245**

**Environmental Sociology** 

This course examines the historical and present-day relationships within and among six crucial factors of social ecology: population, social organization, human values, environment, resources, and technology. Questions of an ethical and policy nature are raised regarding the above factors and the human condition. Prerequisite: SOCI 100 or ANTH 100 or ESM105.

#### SOCI 247 Human and Cultural Origins

This course examines the evidence for human origins and modern human biological diversity. The course helps to dispel the idea of biological race. Prerequisite: SOCI 100 or ANTH 100. (F,Sp)

#### SOCI 250 Introduction to Social Statistics

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

Examines the techniques of statistical analysis used in the social sciences. The focus is on both descriptive and inferential statistics. Topics of interest include measures of central tendency and dispersion, sampling, contingency analysis, correlation and basic multivariate techniques. Prerequisites: SOCI 100, or ANTH 100, or PSYC 101, or POLS 114.

# SOCI 289 0.5-3 cr. Special Topics in Sociology

SOCI 300

#### **Research Methods** This is a writing intensive course. It examines the techniques of social investigation and data analysis. The emphasis is on problems of research design, population analysis, sampling, interviewing, observation, scaling devices, graphic techniques, and methods of data analysis. Prerequisites: SOCI 200 and SOCI 250. (F, Sp)

SOCI 305 3 cr. Data Analysis

#### SOCI 310

Sociology Through Film Film is used to explore and demonstrate the relevance of sociological thinking. Taking an active role, students will learn to go beyond the directorA?s theory of the plot and the character's motivations, and analyze it with their own sociologically informed perspective. As critics, students are encouraged to draw sociological meaning from the film that the film-makers may not have intended. Co-listed as SOCI 310 (prerequisites SOCI 100 or ANTH 100 or FILM 200 or Consent of Instructor; as offered).

#### SOCI 315 Sociology of Later Life

This course is a sociological examination of the aging process, societal implications, and societal reactions to the aged. It will also help the student learn how to deal more successfully with aging parents/ grandparents and how to age successfully themselves. Prerequisites: SOCI 100 or ANTH 100. (F)

#### 3 cr. SOCI 323

3 cr.

3 cr.

3 cr.

3 cr.

#### Sociology of Family

An examination of the social structure and social interactions in families. Crosscultural comparisons are examined as well as issues pertinent to western family life: mate selection, family life cycle, gender roles, parenting, abuse, and death. SOCI 100 or ANTH 100. Co-listed as WMST 323. (Yearly)

#### SOCI 325 3 cr. Theory and Practice Social Work I

#### SOCI 326 3 cr. Sociology of Gender Roles

This course analyzes the various social, cultural, and social-psychological processes which are related to gender role identity and gender differentiated behavior. The course also explores the relationships between gender stratification and the options and life-chances of men and women in the United States and across the world. Prerequisites: SOCI 100 or ANTH 100. Colisted as WMST 326. (Sp)

# SOCI 330

Social Organization The course is an introduction to the structure and process of social organization. Emphasis is placed on organizational processes such as differentiation, integration and the allocation of power within modern bureaucracy. Consideration is also given to the work attitudes of job satisfaction and organizational commitment as well as the changing nature of occupations in modern industrial society. Prerequisite: SOCI 100 or ANTH 100, or consent of instructor. (yearly)

#### SOCI 338 Global Health and Disease

The course explores the relationships between lifestyle, health, and disease, emphasizing the importance of culture and social structure. Global and national social epidemiology (the study of disease and health in various populations), re-emergent and emergent infectious disease problems such as tuberculosis, influenza, cholera, and bovine spongiform encephalopathy, ebola, and HIV, respectively; indigenous healing, and health care delivery systems are a major focus of this course. Co-listed as ANTH 338. Prerequisite: SOCI 100 or ANTH 100. (Sp)

#### SOCI 340 Sociology of Rural Life

The study of major changes in rural life especially the changing demographic profiles in the United States and the developing world. Analysis of the impact of change on the family and other social institutions and sources of cohesion and

218

3 cr.

3 cr.

conflict in the rural community. Rural development intervention will be studied. Prerequisite: SOCI 100 or ANTH 100.

#### **SOCI 345**

#### Sociology of Urban Life

Systematic analysis of the ecological, structural and cultural dimensions of urbanization and its consequences. Utilizes a global perspective but emphasizes the American metropolitan situation and contemporary issues. Prerequisite: SOCI 100 or ANTH 100.

#### **SOCI 348**

**Faces of Culture** 

The full extent of the human imagination is revealed in cultural diversity. The course highlights cultural variation, human adaptability, and the skills of the anthropologist in studying and explaining cultures. Co-listed as ANTH 348. Prerequisites: SOCI 100 or ANTH 100. (F, Sp)

#### **SOCI 378** 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)

The course is designed for sociology

majors desiring actual work experience

resources, human services, business, law,

in a supervised setting such as human

2.25 overall GPA, 2.5 sociology GPA,

admission to the Sociology Internship

#### **SOCI 379** Internship in Sociology

6-12 cr.

3 cr.

3 cr.

#### **SOCI 435** Social and Cultural Change

junior/senior standing.(F)

This course examines the causes and consequences of social change. Various approaches are introduced. Special etc. Only 6 credits may apply to the major. attention is devoted to the individual's role Prerequisites: sociology major, 2 sociology, in creating and dealing with social change. Co-listed as ANTH 435. Prerequisites: SOCI 200, 15 total credits of sociology, and junior/senior standing.(yearly)

appreciation of cultural and biological

exploration, and visits to Mayan temples.

The reef component focuses on the marine

diversity. Sample rainforest activities

environment, and includes sailing and

snorkeling. There are opportunities for

SCUBA certification. Licensed guides

conservation organizations. A day trip to

are used. Presentations are made by

Tikal in Guatemala is included.

**Social and Cultural Theories** 

An introduction to social and cultural

theory through the reading of theorists such

as Durkheim, Merton, Mills, Marx, Mead,

theories. Prerequisites: SOCI 100, 200, 15

total credits of sociology, and junior/senior

This course is an examination of the social

determinants of individual behavior with

emphasis on theories of socialization

influence, interpersonal attraction,

aggression, conformity, attitude and

and social learning, processes of social

behavior change, and altruism. A variety

of theoretical perspectives are presented

psychology or consent of instructor, and

for evaluation. Prerequisites: SOCI 200 or

PSYC 101, 15 total credits of sociology or

Comte, and others and the analysis of major

**SOCI 400** 

standing.(F,Sp)

Social Psychology

**SOCI 410** 

include trekking, canoeing, cave

#### **SOCI 445** 3 cr. **Power and Inequality**

This course examines the central concepts, history, theoretical arguments and contemporary determinants of social inequality and social class in the United States and the world, seeking to answer the question, who gets what, and why? Prerequisites: SOCI 200, and junior/senior standing.(Sp)

#### **SOCI 448**

3 cr.

**Populations and Demography** 

# **SOCI 480**

**Senior Seminar** 

This is a writing intensive senior seminar enabling majors to integrate and apply knowledge from previous sociology

courses. It also serves as the cornerstone of the department's assessment efforts. Prerequisites: 27 credits of sociology including SOCI 300 and SOCI 400 and senior status.(F, Sp)

#### **SOCI 489** 0.5-3 cr. Special Topics in Sociology

#### **SOCI 490** Readings

1-2 cr.

1-2 cr.

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

For majors and minors in sociology or criminal justice seeking additional reading relating to sociology or criminal justice. Students must complete an application and receive departmental approval before registering. Limited to 2 credits per semester and a total of 4 credits. Prerequisites: 18 credits of sociology/criminal justice and major in sociology or minor in sociology or criminal justice.(F,Sp,SS)

#### **SOCI 499 Independent Study**

For majors and minors in sociology or criminal justice seeking some special experience and background relating to sociology or criminal justice. Students must complete an application and receive departmental approval before registering. Limited to 2 credits per semester and a total of 4 credits. Prerequisites: 18 credits of sociology/ criminal justice and major in sociology or minor in sociology or criminal justice.(F, Sp, SS)

#### SOIL SCIENCE

#### **SOIL 210**

#### **Introduction to Soil Science**

Students will study the physical, chemical and biological properties of soil and their application to both agricultural and non-agricultural uses. Lab fee required. Prerequisite: CHEM 121 or equivalent.(F, Sp)

#### **SOIL 270** Internship I

#### 2-4 cr.

3 cr.

An off-campus occupational work experience for the student. Involves full-time employment with a cooperating agency or firm. Prerequisites: 30 cr. and consent of director and faculty coordinator.(F,Sp, SS)

#### **SOIL 271 International Internship**

An international work experience at a professional level. Participants will attend 6-8 scheduled orientation meetings during the semester prior to the work experience. Special course fees required. Prerequisites: 30 semester credits.(F, Sp, SS)

219

4 cr.

Program.(F, Sp, SS) **SOCI 381** 2 cr. Seminar **SOCI 389** 0.5-3 cr. **Special Topics in Sociology** 

This course provides an opportunity to study a selected topic in Sociology. Sample topics include death and dying, population/demography, political sociology, etc. Prerequitisite: SOCI 200 or consent of instructor.(when possible)

#### **SOCI 395 Belize Study Tour**

This course requires on-campus study of Belize peoples, wildlife, and habitats followed by a spring break tour to Belize. Students are immersed in a variety of environmental settings to improve their

SOIL 289	0.5
Special Topics in Soil Science	

SOIL 311	
Soil Fertility	

The influences of chemical and biological properties of soils on plant growth, fertility requirements, fertilizers and their applications and the methods and instruments used for fertility analysis of soils will be studied. Prerequisites: SOIL 210 and MATH 146.(F, Sp)

#### **SOIL 325** 3 cr. Hydric Soils and Wetland Environments

A lecture and field study of the characteristics that make hydric soils and wetlands unique environments. Formation and interaction between hydric soils, wetland vegetation, and hydrology creating specific wetland types will be studied. Functions and values of wetlands to society and the regulatory aspects of wetland use and protection will be considered. Prerequisites: SOIL 210 and BIOL 100 or HORT/CROP 161.(F)

#### **SOIL 350** Pedology

The course provides a detailed study of

soil properties in the field, identifying and recording soil differences on maps, interpreting soil properties for specific uses, understanding soil formation and weathering, and integrating information into a comprehensive classification system. Prerequisite: SOIL 210 or equivalent.(F, alternate years)

#### **SOIL 370 Internship II**

An additional off-campus occupational work experience for the student. Involves full-time employment with a cooperating agency or firm. Prerequisites: Ag. 270 and consent of director and faculty coordinator.(F, Sp, SS)

#### **SOIL 378** Semester Abroad

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)

SO	IL	389	
a		1 7 1 1	

# **Special Topics in Soil Science**

**SOIL 440** 

**Soil and Water Conservation** 

The need to conserve soil and water resources and the methods of doing so will be examined. Emphasis is placed on predicting and controlling soil erosion from cultivated land, techniques for maintaining high levels of crop production while conserving soil and water conservation structures. Prerequisites: Computer proficiency or CSIS 105, MATH 146 and SOIL 210. Co-listed as SOIL 440. (F, Sp)

#### **SOIL 460** Soil Physics

The physical properties of soils, their behavior, prediction, and management will be examined. The course includes discussion of the principles which govern the behavior of the soil/water system in relation to plant growth and land use. Prerequisites: SOIL 210.(Sp)

#### **SOIL 485** Seminar: Soil Science

This is a writing intensive course. The course includes a review of new developments in the fields of soil and crop science and presentation of seminars covering one or more of these developments. Prerequisite: senior standing.(Sp)

SOIL 489	0.5-3 cr.
Special Topics in Soil Science	

# **SOIL 490 Independent Study**

Skills involved in selected procedures and techniques applied to agronomic practices will be utilized. Prerequisite: consent of instructor.(F, Sp)

#### SOCIAL WORK

#### **SOWK 150**

**Introduction to Social Work Services** This course is designed to provide an introduction to social work services. It will include an examination of required skills, settings for practice, client populations, special issues, history of social work services, current social service programs and policies, and how social work differs from other professions. It will also provide an opportunity to examine the values/ethics integral to social work practice and begin to explore the compatibility of personal value systems with those of the profession.(F, Sp)

#### **SOWK 205**

Introduction to Social Work and Welfare This is a writing intensive course. This course is designed to provide an introductory knowledge of social welfare and social work, the philosophy of the methods of social work practice and human behavior in macro systems, the current issues in social welfare, the three major perspectives of social welfare/social

work and the professionalization of social work. An integral part of the course is the analysis of personal values and ethics in conjunction with an understanding of social work values and ethics. Also included is a beginning understanding of the systems perspective and generalist social work practice. Prerequisites: SOCI 100, SOWK 150 or consent of instructor.(F)

# **SOWK 215**

3 cr.

3 cr.

3 cr.

Human Behavior in Social Environment This course will describe and explain intraand inter-individual human behavior over the life span, the consequences of those behaviors in interactions with systems in the social environment and the implications of both for social work practice. Special attention will be paid to helping students understand not only the typical processes of development, but also to appreciate the individuality which each person brings to that process.(Sp)

#### **SOWK 250**

3 cr.

1 cr.

1-3 cr.

3 cr.

3 cr.

**Use, Abuse and Addiction** This course will introduce students to theory and research relevant to understanding the process of addiction. It will include information on problem identification as well as strategies and skills necessary for entry level work with persons who are addicted. It will also include content on prevention. Although the major focus of this course will be on chemical dependency, content will be included on other addictions including eating disorders and gambling. This course will emphasize the impact of addiction on the family and other social systems. It will be taught from a social work perspective, however, it will be useful for any student planning on becoming a helping professional.(F)

#### **SOWK 260**

**Practice with Diverse Populations** Students in this course will learn the theoretical frameworks, knowledge and skills necessary for working with minority populations as helping professionals. It will include specific content appropriate for practice with Native American, African American, Hispanic and Hmong persons as well as content on other minority populations including women; people who are gay, lesbian, or bisexual, as well as persons with disabilities. Although this course is taught from a social work perspective, it is appropriate for all students considering helping professions.(Sp)

**SOWK 289** 0.5-3 cr. Special Topics in Social Work

5-3 cr.

4 cr.

4 cr.

2-4 cr.

3-6 cr.

0.5-3 cr.

#### **SOWK 300**

#### **Research Methods**

This is a writing intensive course. Designed to enable students to learn the value of research for understanding human behavior and improving social work practice decisions. The emphasis is on basic concepts, the research process, research designs (particularly single subject designs), evaluation research, collecting and analyzing data, qualitative research, writing reports and ethical issues. Prerequisite: PSYC 201 or MATH 226 or ECON 326.(Sp)

# **SOWK 324**

**Theory and Practice I** This course in basic helping processes will help students integrate social work values and ethics as well as teach students the problem solving process integral to social work practice with individuals, families, groups, organizations and communities. It will provide the students with an introduction to basic communication skills needed at all levels of generalist social work practice and with a beginning opportunity to practice those skills at the individual system level. Prerequisites: SOWK 150, 205, 215 and admission to

#### **SOWK 325**

major.(F)

#### **Theory and Practice II**

This course will assist the student to apply the basic helping process skills learned in SOWK 324 by focusing on skill development beyond the individual system to family and small group systems. The focus will highlight the specific transition from individual systems to the use of family and small group systems. Examples will be utilized. Further skills in group process, family dynamics, communication and problem solving with small group systems will be developed. Prerequisite: SOWK 324.(Sp)

SOWK 335	3 cr.
Child Welfare	

#### **SOWK 350 Social Welfare Policy**

This course is designed to acquaint the student with social welfare policy and social justice in the United States, the impact of that policy on program development and the manner in which needs of society are met or left unmet. It is further designed to help the student realize and practice the influence of social workers, and the steps necessary to implement such a change effort in policy/practice situations Prerequisites: SOWK 205, ECON 100, POLS 114 or consent of Social Work Program Director. (F)

#### **SOWK 389** 3 cr.

3 cr.

3 cr.

3 cr.

#### **Special Topics in Social Work**

This course provides students with entry level knowledge and skills appropriate for working in the diverse areas identified as child welfare including: physical/sexual abuse, neglect, adoption, foster/institutional care, juvenile court/corrections, as well as children who are at risk because of chemical abuse/dependency, poverty, divorce, discrimination, etc. It also covers many of the philosophical, political and ethical issues which are a challenge in child welfare policy and program development today. (Bi-yearly)

#### **SOWK 424 Crisis Intervention and Advanced** Interviewing

This is a senior level practice course designed to explore and develop the knowledge and skills used by social workers in acute human helping contexts. The major focus of this course is on the skill development of use-of-self in interviewing and problem solving in difficult psychosocial contexts, including individual, family, and mass crisis. Prerequisites: SOWK 325, concurrent registration with SOWK 472.(F)

# **SOWK 426**

#### **Theory and Practice III**

Designed to continue the students' understanding and utilization of a systems perspective, this course helps the student develop a conceptual understanding of the macro systems (organizations, communities and society) as well as of applying this knowledge to professional practice. Prerequisite: SOWK 325, concurrent registration with SOWK 472.(Sp)

#### **SOWK 472 Social Work Field Instruction**

Students are given direct practice experience in a community agency to gain an in-depth understanding of the activities and programs of an agency, and, most important, to begin integrating social work knowledge, skills, values and ethics in a practice setting. The student spends 225 hours both fall and spring semesters at a social work agency for six credits each semester. Students are also required to attend weekly meetings with the faculty liaison and register concurrently for SWK 480 and 426 (fall semester) and SOWK 481 and 424 (spring semester). Prerequisites: SOWK 300, 325, 350, and admission to Field Placement Program.(F, Sp)

#### **SOWK 480**

**Senior Integrative Seminar** This course is designed to be taken concurrently with field instruction. The student will engage in a semester long

0.5-3 cr.

3 cr.

3 cr.

6 cr.

3 cr.

process of exploring the integration of social work/social welfare practice knowledge, skills, values and ethics with organizational tasks, responsibilities and policies preparatory to their entering the field of generalist practice. Prerequisite: concurrent registration in SOWK 472.(F)

#### **SOWK 481**

#### 3 cr. **Integrating Policy and Research**

An integrative course exploring advanced social work practice issues as they are influenced by social welfare research. Taken concurrently with Social Work 472, students are assisted in evaluating and utilizing their own skills within an agency setting in signal subject design, survey research, program evaluation, etc. Prerequisite: Concurrent registration in SOWK 472.(Sp)

#### **SOWK 489** 0.5-3 cr. Special Topics in Social Work

#### **SOWK 490**

1-2 cr.

**Readings in Social Work** The course is designed for social work majors. Student must complete an application and receive department approval before registering. Students are limited to three credits per one semester and a total of four credits. Prerequisite: Junior status.(F,Sp)

#### **SOWK 499**

1-2 cr.

Independent Study: Social Work The course is designed for social work majors. Student must complete an application and receive department approval before registering. Students are limited to two credits per semester and a total of four credits. Prerequisite: junior status.(F,Sp)

#### **SPANISH**

SPAN 100	2 cr.
Spanish for Travelers	

#### **SPAN 101 Beginning Spanish I**

4 cr.

4 cr.

An introduction to Spanish through conversation, writing practice and cultural material. 101 presumes no previous study of the language.(F)

#### **SPAN 102**

**Beginning Spanish II** 

A continued introduction to Spanish through conversation, writing practice and cultural material. Prerequisite: SPAN 101 or test-out.(Sp)

#### **SPAN 201**

#### Intermediate Spanish I

Review of basics of Spanish grammar; conversation, reading, and culture. Prerequisite: SPAN 102 or test-out.(F)

SPAN 202	3 cr.	
Intermediate Spanish II		
Continuation of Spanish gram		
conversation, reading, and culture.		
Prerequisite: SPAN 201 or test-out.(Sp)		
CDA N. 200	0.5.2	
SPAN 289	0.5-3 cr.	
Special Topics in Spanish		

SPAN 301	3 cr.
Spanish Composition and Conver	sation I
Conversation, composition and styli	stics
of Spanish, Emphasis is on developi	nø

proficiency in active skills, i.e., speaking and writing. This is a writing intensive course. Prerequisite: SPAN 202 or testout.(F)

#### **SPAN 302**

**Spanish Composition and Conversation II** Conversation, composition and stylistics of Spanish. Emphasis is on developing proficiency in active skills, i.e., speaking and writing. This is a writing intensive course. Prerequisite: SPAN 202 or testout.(Sp)

#### **SPAN 341 Spanish Civilization to 1800**

A language proficiency course that builds intercultural communication skills through the study of Spanish cultural history and civilization from the beginnings to 1800. In Spanish. Prerequisite: SPAN 202 or consent of instructor.(F, alternate years)

#### **SPAN 342** 3 cr. Spanish Civilization from 1800 to Present

A language proficiency course that builds intercultural communication skills through the study of Spanish cultural history and civilization from 1800 to the present. The course is taught in Spanish. Prerequisite: SPAN 202 or consent of instructor.(Sp, alternate years)

#### **SPAN 345**

3 cr. Latin American Civilization to 1800

A language proficiency course that builds intercultural communication skills through the study of Latin American cultural history and civilization from pre-Columbian times to 1800. The course is taught in Spanish. Prerequisite: SPAN 202 or consent of instructor.(F, alternate years)

#### **SPAN 346** 3 cr.

#### Latin American Civilization

A language proficiency course that builds intercultural communication skills through the study of Latin American cultural history and civilization from 1800 to the present. The course is taught in Spanish. Prerequisite: SPAN 202 or consent of instructor.(Sp, alternate years)

#### **SPAN 350**

3 cr.

3 cr.

#### **Spanish Phonetics**

Techniques of perfecting and teaching Spanish pronunciation. Prerequisites: SPAN 201 or consent of instructor.(Sp)

#### **SPAN 351** Survey of Spanish Literature

A language proficiency course that builds intercultural communication skills through the study of some of the best writings of Spain's Golden Age of Literature. The course examines the works of Cervantes, G??ngora, Ouevedo, Lope de Vega, Tirso de Molina and Calder??n. The course is taught in Spanish. Prerequisite: SPAN 202 or consent of instructor.(F, alternate years)

#### **SPAN 352** Survey of Spanish Literature

A language proficiency course that builds intercultural communication skills through the study of highlights of the literature of Spain from the writers called the Generation of 1898 to the present. The course is taught in Spanish. Prerequisite: SPAN 202 or consent of instructor.(Sp, alternate years)

#### **SPAN 355**

3 cr.

Survey of Latin American Literature A language proficiency course that builds intercultural communication skills through the study of Latin American chronicles, poetry and, prose from the period of the conquest and colonization to the mid nineteenth century. Representative authors are sampled along with some of their major works. Essential background for an understanding of the various periods is included. The course is taught in Spanish. Prerequisite: SPAN 202 or consent of instructor.(F, alternate years)

#### **SPAN 356**

#### Survey of Latin American Literature

A language proficiency course that builds intercultural communication skills through the study of Latin American essays, poetry and, to a limited extent, drama from the mid-nineteenth century to the present. Representative authors are sampled along with some of their major works. Essential background for an understanding of the various periods is included. The course is taught in Spanish. Prerequisite: SPAN 202 or consent of instructor.(Sp, alternate years)

# **SPAN 378**

3 cr.

2 cr.

3 cr.

3 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)

#### **SPAN 389 Special Topics in Spanish**

**SPAN 401** 3 cr. Advanced Spanish Communication The capstone course of the language

sequence. It is designed to refine a student's speaking ability with an emphasis on grammatical accuracy and idiomatic authenticity. Prerequisite: SPAN 302 or consent of instructor.(F, Sp)

#### **SPAN 452** 3 cr. Advanced Spanish LIT In-depth study of specific aspects of

Peninsular Spanish literature in order to develop a higher level of proficiency in the reading, speaking, writing and oral comprehension of Spanish. Offered with varying sub-topics. The course is taught in Spanish. Prerequisite: SPAN 302 or consent of instructor.(SP, alternate years)

#### **SPAN 455** 3 cr.

**Advanced Latin American Literature** In-depth study of specific aspects of Latin American literature in order to develop a higher level of proficiency in the reading, speaking, writing and oral comprehension of Spanish. Offered with varying subtopics. The course is taught in Spanish. Prerequisite: SPAN 302 or consent of instructor.(Sp, alternate years)

#### **SPAN 489** 0.5-3 cr. Special Topics in Spanish

1-3 cr.

3 cr.

# **SPAN 490**

# **Readings in Spanish**

An independent reading program in Spanish. Prerequisite: SPAN 302 and consent of instructor.(F, Sp)

#### SCHOOL PSYCHOLOGY

#### **SPSY 422**

3 cr.

**Emotional and Behavioral Problems** This course provides an examination of the nature, characteristics and etiology of emotional/behavioral disorders in children and adolescents. In addition, major topics, which include the assessment of emotional and behavioral problems, internalizing and externalizing disorders, the relationship between achievement and behavioral

#### 3-6 cr.

0.5-3 cr.

difficulties, suicide/depression, at-risk students, appropriate intervention strategies including behavior management techniques and the prevention of emotional/behavioral disorders, are discussed.

#### SENIOR SEMINAR HONORS

3 cr.

2 cr.

2 cr.

5 cr.

SSHO 289 Honors Seminar

#### **TEACHER EDUCATION**

#### TED 120 3 cr. Intro to Education and Instructional Technology

The course provides an overview of middle and secondary education with an emphasis on the integration of learning technologies. Specific topics such as various components of the teaching profession, purpose of schools, school administration and governance, curriculum, standards and lesson plans will be introduced. Students will gain a working knowledge of instructional technology tools used in support of project based learning. Prerequisites: Completed 12 credits and 2.5 combined GPA or higher.(F,Sp)

#### TED 150 Efficient Reading

#### **TED 155**

# Intro to Tech Integration and the Reflective Multimedia Portfolio

Students gain a working knowledge of instructional technology tools used in support of project-based learning. Students produce a Reflective Multimedia Portfolio organized around the Wisconsin Teaching Standards. This electronic portfolio will showcase artifacts and reflections required for the completion of the Elementary Education program and begin to address D.P.I. certification requirements. This course explores the effective integration of instructional technology in the elementary classroom.

#### TED 211

# Educational Psychology: Elementary Education

This is a writing intensive course designed to develop an understanding of psychological theories related to education. Six major areas of focus include development, learning, motivation, measurement and evaluation, classroom management, and individual differences. Students learn instructional applications of each area through reading about and discussing relevant theories. Students reflect on what they are learning through analyzing case studies, participating in a ten-hour field experience in pre-K-9 classroom settings and through various in-class activities. Prerequisites: Preadmission to elementary education, communicative disorders or physical education; sophomore standing in a K-12 teaching program or consent of instructor is required. Materials fee required.(F,Sp)

#### TED 212 5 cr. Educational Psychology: Middle and Secondary Education

This is a writing intensive course designed to develop an understanding of psychological theories related to education. The focus includes development, views of learning, instructional applications of learning theory, concepts of motivation and implications for motivating students, classroom management, individual differences and evaluation. In addition to reading about and discussing these theories, students reflect on what they are learning through analyzing case studies and participating in a 25 hour field experience in a classroom setting. Prerequisites: TED 120.(F,Sp)

#### TED 225 3 cr. Developmental Learning Experiences of Young Children

This course teaches the basic aspects of child development and child study. It is designed to provide an understanding of the interrelatedness of the theories of child development and an understanding of the important factors that affect the young child's development. Emphasis of this course lies in observational, recording and evaluation techniques of the young child's individual development. Prerequisite: TED 211. Materials fee required.(F,Sp)

#### **TED 252**

**Foundations of Multicultural Education** This course is designed to provide students with an opportunity to gain a meaningful understanding of multicultural education. Students will study the effects and influence of cultural diversity in American education. The topics of cultural diversity include ethnicity and race, gender, SES, religion, exceptionality, language, and learning styles. Students will also study current affairs that influence the educational decisions as they relate to multicultural education. All topics will be studied within the context of history, differing philosophies, and various theories and practices of multicultural education in the United States. Materials fee required.(F, Sp)

#### TED 255

#### Reading Guidance for Children

The emphasis of this course lies in the selection and creative presentation of literature and stories with consideration for the developmental needs and capabilities of children. It includes content which explores the cultural history and value of literature and storytelling. This course also explores the nature of reader response and ways to involve children in literature.(F,Sp)

# TED 2701 cr.Information Technology Practicum1 cr.TED 2752 cr.Cooperative Work Exp Secondary<br/>Education2 cr.TED 2891-3 cr.Special Topics in Teacher Education4 cr.

**Elementary Techniques in Language Arts** The purpose of this course is to provide opportunity for intensive and systematic study of the skills required to communicate successfully. Coupled with each skill component will be a practical and realistic demonstration of current teaching practices known to be effective in teaching the language arts in grades K-9. Students will have the opportunity to implement ideas from class in the field component of the course. Prerequisite: Admission to Teacher Education. Materials fee required.(F, Sp)

#### **TED 311**

4 cr.

4 cr.

Elementary Techniques Social Studies This course acquaints the future teacher with objectives, materials, strategies, and types of evaluation for the effective teaching of concepts, skills, and values in elementary/middle school grades K-9 social studies. Opportunity will be provided to work with children and school personnel while having the guidance of the course instructor and elementary classroom teachers. Prerequisite: Admission to Teacher Education. Materials fee required.(F, Sp)

#### **TED 312**

3 cr.

3 cr.

#### **Elementary Techniques Science**

This course is designed to teach students how to write effective lesson plans for hands-on, minds-on, hearts-on science activities. A constructivist approach, one that stresses the relationships between objects and events, concepts and principles will be followed. Students learn how to construct lesson plans in a way that corresponds to the way scientists construct knowledge. There will be ample opportunities to present these lessons to elementary students and to evaluate results. Prerequisite: Admission to Teacher Education. Materials fee required.(F,Sp)

#### TED 315

# 4 cr.

**Elementary Techniques in Mathematics** This course addresses two major areas: 1) what mathematics should be taught in elementary schools and 2) how elementaryaged children learn mathematics. Emphasis will be placed on specific methods, instructional materials and evaluation procedures. Opportunities will be provided for students to use a wide variety of manipulative materials and to become actively involved in their own learning. Students will have opportunities to apply ideas from class in the field component of the course where they will be asked to reflect on their lesson planning and teaching. Prerequisites: Admission to Teacher Education, MATH 246 and 247; TED 310, 311 and 312. Materials fee required.(F,Sp)

#### **TED 316 Developmental Reading**

This course addresses reading as a developmental process in grades K-6 with an emphasis on meeting the needs of individual learners. Students develop knowledge of reading assessment tools and of how to match assessment results to instructional strategies. They apply their knowledge by developing a Single Child Portfolio: they assess a focus child in their practicum setting and instruct the child based on their assessment results. Experiences in critical analysis of current materials are included. Development of the reflective practitioner in social, cultural and psychological contexts is emphasized in this course. Prerequisites: Admission to Teacher Education, TED 310, 311 and 312. Materials fee required.(F,Sp)

# **TED 317**

#### **Reading Practicum**

This course is designed to provide future teachers with directed practice in teaching reading to small groups of students in school settings, K-9. Experiences in the planning and preparation of lessons, modification of lesson procedures and materials to fit student needs, and the ongoing evaluation of student progress are included. Prerequisites: Admission to Teacher Education, TED 310, 311 and 312. Materials fee required.(F,Sp)

#### **TED 330**

#### **Infant and Toddler Programs**

This course provides students with guidelines and practice for meeting the developmental needs of young children in infant/toddler programs. The course content will apply developmental theories to the curriculum of care and play of the infant and toddler. Students will have the opportunity to practice observation skills and will have some experience assisting in group care of infants and toddlers. Students will engage in observation and environment and curriculum planning taking into account developmental needs of individual children, patterns of interaction between adults and children, health and safety standards, social-cultural differences and evaluation of infant/toddler program models. Field experience of approximately 20 hours providing the opportunity for observation and hands-on experience is incorporated in the course. Prerequisite: TED 211, CO-requisite: TED 225. (F, Sp)

# **TED 331**

Fear of Speaking

This course discusses development of speech fear as well as preventative and therapeutic strategies. It is intended for students afraid to speak or interested in providing treatment for speech fear. Also listed as SCTA 331/531 and 331/531.(F,Sp)

3 cr.

3 cr.

3 cr.

3 cr.

#### **TED 335**

4 cr.

**Kindergarten Curriculum and Materials** Course work focuses on simulated experiences to guide students in developing a whole language-integrated curriculum approach for the kindergarten classroom. Special emphasis is placed on concept and skill development, critical thinking, and problem solving as it relates to the developmental capacities of kindergarten children. Classroom organization and management, the teacher's role and current practices are critically examined. The political, economic, historical and social issues which influence changes in kindergarten curriculum are discussed. Prerequisites: TED 225, 330, 340,345. Materials fee required.(Sp)

#### **TED 340**

4 cr.

3 cr.

Pre-Kindergarten Curriculum This course acquaints students with the theory and background for using developmentally appropriate practices with pre-kindergarten children. Students study effective methods and materials to develop concepts, skills and values in early childhood settings. Pre-practicum experience provides opportunity to observe and work with children and families while under the guidance of a cooperating teacher and with instructor consultation. Prerequisite: TED 225. Materials fee required.(Sp)

#### **TED 345 Parent Education and Family** Development

This course provides students with a comprehensive study of family development, the parent/child/caregiver triad, parent involvement, family education models, diversity among family and child rearing practices, effective homeschool-community relationships, rights and responsibilities of parents and children and resources for home-school programs. Prerequisites: TED 211, 225,

330. Co-requisite: TED 340. Materials fee required.(F)

# **TED 362**

**Computers in Instruction** This introductory course is designed to provide educators with an overview of instructional applications of computers and an outline of the teacher's role in the evaluation, application and management of instructional software; treatment of topics includes the capabilities of instructional software, instructional programming, and the impact of technology on school curriculum and policy. Students will demonstrate an application of the microcomputer in an instructional setting. Activities in the course assume no previous experience with microcomputers. Prerequisite: TED 211 or 212 or consent of instructor. Also listed as CSIS 362/562.(F,Sp)

#### **TED 378** 3-6 cr. Semester Abroad

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)

#### **TED 385** Media Workshop

**TED 389** 

1-3 cr.

2-3 cr.

**Special Topics in Education** Selected topics of current interest. Credits may be earned in this course each time the topic changes. No more than three credits may be applied to a degree program.

Prerequisite: TED 211 or 212 (F, Sp)

#### **TED 400** 2 cr. Supervision and Management of Early **Childhood Programs**

This course provides experiences in assessing needs; utilizing community resources for development and implementation of pre-kindergarten programs; staffing of preschools, including the selection, training, and supervision of personnel; budget development and management; and funding sources. Taken concurrently with or following student teaching in PreK/K.(F, Sp)

#### **TED 405** 3 cr. Early Childhood Special Needs

Designed for those who will teach children ages 3-6 at the nursery or kindergarten level, this course builds classroom teachers' awareness of the roles and procedures in initial identification of student needs. Course emphasis is on modification of

the classroom environment, materials and instruction to meet children's individual needs. Students gain from writings and observations of professionals in the field and are given the opportunity to volunteer assistance in assessment and instructional activities of early childhood programs. Prerequisites: TED 225,330,340,345; PSYC 330. Taken concurrently with TED 335. Materials fee required.(Sp)

3 cr.

4 cr.

3 cr.

3 cr.

#### **TED 410**

#### Early Childhood Language Arts

This course will acquaint the participant with language development in early childhood. Building upon this foundation, students will explore strategies for teaching early childhood language arts including developing a balanced reading and writing program and integrating language arts with other subjects. Any teacher interested in meeting the oral language and literacy needs of young children would benefit from this course.(F)

#### **TED 414**

#### Developmental of the Transescent

Students will study the developmental characteristics of the transescent (aged 10-14 year olds) in relation to current theory and research. Emphasis is placed on the development of curriculum and pedagogy in middle level schools to accommodate to the transitional nature of this age range in all categories of development. Practical strategies in peer mediation, conflict resolution, problemsolving, and effective communication will be integrated into curriculum structures to help prospective teachers develop skills for resolving interpersonal and intrapersonal conflicts and to create a positive learning environment for transescents. Prerequisite: TED 211 or TED 212 (undergraduate only).(F, Sp, SS)

#### **TED 420**

#### School and Society

This is a writing intensive senior capstone course that provides the historical, legal, philosophical and ethical framework for teacher decision-making. Students explore the impact of social, financial, political and technological issues which impact K-12 education. Prerequisites: Admission to Teacher Education and completion of Block I for Elementary Education majors.(F, Sp)

#### **TED 422**

#### Secondary School and Content Area Reading

This course provides thorough analysis of the knowledge base and current practice in middle/secondary school literacy in the content areas. Emphasis is on curriculum integration, current technology and strategies that enable students to become independent learners. Special emphasis is on individual differences among readers as well as the social and political implications of global literacy perspectives. Prerequisite: Admission to Teacher Education.(F, Sp)

#### TED 423 Writing, Speaking, Listening

Students study how writing, speaking and listening relate to learning in the content areas. The course includes objectives, strategies, assignment designing and evaluation for writing, speaking and listening for the various content areas in middle, junior high and high schools. Prerequisite: Admission to Teacher Education and TED 414. (F,Sp)

#### TED 424 Inquiry Learning: Society and Environment Early Elementary

This course will focus on inquiry learning - helping students to ask purposeful questions and to find the answers through explorations that integrate science and social studies with literature, the arts and technology. Specific attention will be paid to developing observation skills and encouraging higher order thinking skills and the discourse of collaborative learning. Prerequisites: Permission of the instructor. (SS)

#### TED 425 3 cr. Techniques of Elementary Education: Physical Education

Students develop their competency in designing, implementing, and evaluating lessons in a variety of instructional units in elementary physical education. Emphasis is placed on developing ability to utilize a variety of teaching methods and strategies, and reflective analysis of data collection techniques designed to evaluate student and teacher behaviors, student learning, and student-teacher interactions. Field experience required (25 hours). Prerequisite: P ED 241 and 245, admission to teacher education.(F)

#### **TED 428**

#### **Techniques in TESOL**

Students will gain an undertanding of the role and function of teachers of English to speakers of other languages through the study of approaches, techniques, and curriculum for ESL students. Topics will include current ESL teaching methods: the communicative approach, collaborative learning and CALLA (cognitive academic language learning approach); curriculum design and implementation; and assessment and performance standards. Emphasis will be placed on the teaching of reading, writing, speaking and listening as integrated skills, with an understanding of the influence of such factors as age, learning styles, and educational background on second language acquisition. Field experience required (25 hours). Prerequisite: admission to teacher education.(Sp)

#### **TED 429**

3 cr.

3 cr.

Techniques of Early Childhood-Adolescence:Health Education

This course is designed to prepare students to teach health education as a part of a Comprehensive School Health Education program. Students will design lessons as well as practice and reflect on strategies and methods for teaching health education. Although instructional techniques are emphasized, other professional considerations (e.g., professional growth, professional organization and publications, resources, use of technology) are incorporated in the course structure. Field experience required (25 hours). Prerequisite: Admission to Teacher Education.(F)

#### TED 430 Techniques in Art

3 cr.

3 cr.

3 cr.

This course is designed to prepare students to teach middle/secondary school art and covers writing curriculum, instructional techniques, management, evaluation and professional behavior. Field experience required (25 hours). Prerequisites: Admission to Teacher Education and ART 253.(Sp)

#### **TED 431**

#### **Techniques in Computer Science**

Issues dealing with the teaching of computer science are explored. These issues include: content, methods of delivery, assessment, classroom management, laboratory (development, management, and maintenance), curriculum development, continuing professional growth, and professional conduct with the students, staff, and community. Field experience required (25 hours). Prerequisites: Admission to Teacher Education.(upon student request)

#### **TED 432**

**Techniques in English** 

3 cr.

3 cr.

#### Overall, students will develop understandings of the role and functions of teachers of English through consideration of goals, curriculum, and content (composition, literature, language and media) and skills; key principles and processes; and classroom strategies for

media) and skills; key principles and processes; and classroom strategies for teaching content and skills. In a workshop setting, lesson and unit planning are practiced, strategies are experienced, and issues and problem solving are considered. Field experience required (25 hours). Prerequisite: Admission to Teacher Education.(F)

#### **TED 433**

3 cr.

3 cr.

3 cr.

3 cr.

**Techniques in Social Studies** This is primarily an experiential course where students design lessons as well as practice and reflect on strategies and methods for teaching social studies curricula at the middle and secondary levels. Students will also examine issues of interdisciplinary curriculum design and the philosophical/ historical basis of social studies as a discipline. Finally, they will have an opportunity to experiment with materials and resourcesincluding the use of technologyused in teaching social studies. Field experience required (25 hours). Prerequisite: Admission to Teacher Education. Materials fee required.(Sp)

#### TED 434

#### **Techniques in Science**

This course is designed to prepare the prospective middle/secondary science teacher to direct and evaluate the learning of middle/secondary science students. Although instruction and evaluative techniques are emphasized, other professional considerations (planning, professional growth, teacher-administratorcommunity relations, etc.) are incorporated in the course structure. Field experience required (25 hours). Prerequisite: Admission to Teacher Education.(F)

#### **TED 435**

**Techniques in Physical Education** Students develop their competence in designing, implementing and evaluating lessons in a variety of instructional units. Emphasis is placed on developing ability to utilize a variety of teaching methods and strategies, and reflective analysis of focused observation data collection techniques designed to evaluate student and teacher behaviors, student learning, and studentteacher interactions. Field experience required (25 hours). Prerequisite: Admission to Teacher Education.(S)

#### TED 436 Techniques in Speech

This course is designed to prepare the prospective middle/secondary speech teacher to direct and evaluate the learning of middle/secondary students. Although instruction and evaluative techniques are emphasized other professional considerations (planning, co-curricular activities, professional organization and publications, resources, professional growth, teacher-administrator- community relations, etc.) are incorporated in the course structure. Field experience required (25 hours). Prerequisite: Admission to Teacher Education.(Sp)

#### r. TED 437

#### Techniques of Middle-Secondary Education: Modern Languages

Strategies and theories of teaching modern language, and techniques for teaching language and culture, for using technology, and for evaluation are taught in this course. The focus will be on instruction at the adolescent and adolescent levels, as well as on national standards of language curriculum development. 15 hour field experience required. Prerequisites: Admission to Teacher Education. (Sp)

#### TED 438 Techniques in Mathematics

This course is designed to prepare prospective mathematics teachers to plan appropriate instructional and evaluative activities for middle and secondary school mathematics students. These activities will reflect the recommendations presented in the NCTM Standards. Field experience required (25 hours). Prerequisite: Admission to Teacher Education.(Sp)

#### TED 439

**Techniques in Communicative Disorders** This course is a certification requirement of the Wisconsin Department of Public Instruction. It is designed to prepare prospective speech-language pathologists for work in the public schools. Attention will be directed toward organization of speech-language programs in the schools and federal/state legislation relating to such programs. Program planning, development, implementation and evaluation will also be discussed. Emphasis is placed on (1) identification of pupils with exceptional educational needs in speech-language; (2) multi-disciplinary team evaluations; (3) individual education plan development; (4) service delivery models, (5) due process. Field experience required (25 hours). Prerequisite: Admission to Teacher Education.(F)

#### TED 440 Techniques in Agriculture

Specific methods of creating a positive physical, psychological and social teaching and learning environment in agricultural education are taught. Attention is directed toward appropriate applications of instructional technology materials and equipment, lesson plan development, student evaluation and instructional techniques typical of agricultural education programs in grades 6-12. Field experience required (25 hours). Prerequisites: Admission to Teacher Education and AGED 201.(SP)

#### **TED 441**

2 cr.

3 cr.

3 cr.

3 cr.

#### **Techniques in Journalism**

Students develop an understanding of the role and functions of teachers of journalism and mass communications in middle/secondary school settings. Consideration of goals, journalism/mass communications curriculum, content and skills (media history, practices and effects of media, media writing, student media practicum); key principles and processes; and classroom strategies for teaching content and skills. Consideration given to advising student media (advisor role and function, organizing student media, budgeting, production, evaluations). In a workshop setting, lesson and unit planning in journalism and mass communications are practiced, strategies are experienced, and issues and problem solving are considered. Field experience required (25 hours). Prerequisite: Admission to Teacher Education.(upon student request)

#### TED 442 Field Experience

#### TED 448 2 cr. Techniques of Elementary Education: Modern Languages

Strategies and theories of teaching modern language, and techniques for teaching language and culture, for using technology, and for evaluation are taught in this course. The focus will be on instruction at the early childhood and middle childhood levels, as well as on national standards of language curriculum development. 15 hour field experience required. Prerequisites: Admission to Teacher Education. (Sp)

#### TED 461

# The Psychology and Pedagogy of Literacy

This course explores theoretical, historical and sociological perspectives on the foundations of functional literacy, literacy disorders, holistic assessment and intervention. Emphasis is on the importance of individual differences in reading proficiency, the causes of literacy disorders, and methods for the improvement of general and specific reading difficulties. This course will examine the changing roles of family, community, and institutions in literacy acquisition as a process. Prerequisite: TED 316 or equivalent.(F, Sp, SS)

#### TED 471 Student Teaching: Pre K-K

This course provides classroom practice through observation, participation, and teaching under the direction of a university supervisor and a PreK-K level cooperating teacher in a university affiliated school setting for a full day, full

#### 1-3 cr.

3 cr.

3 cr.

semester experience following the daily schedule and semester calendar of the cooperating school. Students are expected to relate principles and theories from their professional education and pedagogical knowledge base to classroom practice. Prerequisites: Admission to Teacher Education, designated coursework, and satisfactory completion and approval of 50 hours of human relations field experiences.(F, Sp)

12 cr.

1-6 cr.

#### TED 472 Student Teaching: Elementary Education

This course provides classroom practice through observation, participation, and teaching under the direction of a university supervisor and an elementary level cooperating teacher in a university affiliated school setting for a full day, full semester experience following the daily schedule and semester calendar of the cooperating school. Students are expected to relate principles and theories from their professional education and pedagogical knowledge base to classroom practice. Prerequisites: Admission to Teacher Education, designated coursework, and satisfactory completion and approval of 50 hours of human relations field experiences.(F,Sp)

#### **TED 473**

Student Teaching: Middle School This course provides classroom practice through observation, participation, and teaching under the direction of a university supervisor and a middle level cooperating teacher in a university affiliated school setting for a full day, full semester experience following the daily schedule and semester calendar of the cooperating school. Students are expected to relate principles and theories from their professional education and pedagogical knowledge base to classroom practice. Prerequisites: Admission to Teacher Education, designated coursework, and satisfactory completion and approval of 50 hours of human relations field experiences.(F, Sp)

#### **TED 474**

12 cr.

**Student Teaching: Secondary Education** This course provides classroom practice through observation, participation, and teaching under the direction of a university supervisor and a secondary level cooperating teacher in a university affiliated school setting for a full day, full semester experience following the daily schedule and semester calendar of the cooperating school. Students are expected to relate principles and theories from their professional education and pedagogical knowledge base to classroom practice. Prerequisites: Admission to Teacher Education, designated coursework, and satisfactory completion and approval of 50 hours of human relations field experiences.(F,Sp)

#### TED 475 Student Teaching: K-12

This course provides classroom practice through observation, participation, and teaching under the direction of a university supervisor and a cooperating teacher in a university affiliated school setting for a full day, full semester experience following the daily schedule and semester calendar of the cooperating school. Students are expected to relate principles and theories from their professional education and pedagogical knowledge base to classroom practice. Prerequisites: Admission to Teacher Education, designated coursework, and satisfactory completion and approval of 50 hours of human relations field experiences.(F, Sp)

#### TED 476 Elementary Internship

This course provides salaried teaching experience under the direction of a university supervisor and one or more elementary level teachers as part of an instructional team arrangement in a university affiliated school setting for a full day, full semester experience following the daily schedule and semester calendar of the cooperating school. Students are expected to relate principles and theories from their professional education and pedagogical knowledge base to classroom practice. Prerequisites: Admission to Teacher Education, designated coursework, and satisfactory completion and approval of 50 hours of human relations field experiences.(F, Sp)

#### TED 477 1-6 cr. Middle School Internship

This course provides salaried teaching experience under the direction of a university supervisor and one or more middle level teachers as part of an instructional team arrangement in a university affiliated school setting for a full day, full semester experience following the daily schedule and semester calendar of the cooperating school. Students are expected to relate principles and theories from their professional education and pedagogical knowledge base to classroom practice. Prerequisites: Admission to Teacher Education, designated coursework, and satisfactory completion and approval of 50 hours of human relations field experiences.(F,Sp)

# TED 478

12 cr.

12 cr.

#### Secondary Internship

This course provides salaried teaching experience under the direction of a university supervisor and one or more secondary level teachers as part of an instructional team arrangement in a university affiliated school setting for a full day, full semester experience following the daily schedule and semester calendar of the cooperating school. Students are expected to relate principles and theories from their professional education and pedagogical knowledge base to classroom practice. Prerequisites: Admission to Teacher Education, designated coursework, and satisfactory completion and approval of 50 hours of human relations field experiences.(F,Sp)

# TED 47912 cr.K-12 Internship Teaching

#### TED 490 1-3 cr. Readings

This course is designed as an independent study course for seniors who wish to pursue a special topic or area in education. Hours, requirements and credits to be arranged with department chair. Prerequisite: senior standing.(F,Sp)

#### TED 495

0.5-3 cr.

12 cr.

**Contemporary Issues in Education** This seminar is designed to provide practitioners with background and perspective relative to emerging contemporary issues facing the profession and schools.

#### **UNIVERSITY STUDIES**

# UNIV 160

1 cr.

**Freshman Seminar** This course is designed to provide students with an introduction to the life of the university and to the development of the abilities and attitudes necessary to be a successful university student. Students will acquire a sense of what it means to be a serious student and scholar, develop academic and related life skills, become familiar with resources, services and opportunities available to students and establish connections to the university community. The content of the course will center on a topic or theme selected by the individual instructor; this topic or theme will be identified for each section of the course. This course may be offered as pass/fail.(F,Sp)

#### WISCONSIN IN SCOTLAND

WIS 200 British History This is a core course that is taught a the Wisconsin in Scotland Program.		
WIS 201	3 cr.	
Introduction to British Civilizatio	n	
This is a core course that is part of t	he	
Wisconsin in Scotland Program		
WIS 289	1-3 cr.	
WI in Scotland:Special Topics	1-5 cl.	
WIS 300	3 cr.	
The Britisth Gothic Novel		
This is a core course that is taught as part of the Wisconsin in Scotland Program.		
WIS 301	3 cr.	
Scottish Culture Colloquium		
This is a core course that is taught as part of		
the Wisconsin in Scotland Program.		
WIS 389	1-3 cr.	
WI in Scotland:Special Topics		
WIS 489	1-3 cr.	
WI in Scotland:Special Topics		

# WOMEN'S STUDIES

**WMST 200** 3 cr. **Introduction to Women's Studies** This course studies historical and contemporary primary texts by and about women which reveal origins and explanations of women's places in cultures and societies. It further studies the history of women's organized response to their positions in cultures and societies.(F, Sp)

#### **WMST 205**

Women's History: United States This course will offer a multicultural approach to the history of women in the United States. Beginning with the period of contact between Native Americans and Europeans, the course emphasizes the ways that historical developments and social institutions have affected women differently depending on race, class, and ethnicity. Co-listed as WMST 205. (F, alternate years)

3 cr.

3 cr.

#### **WMST 206 Family Communication**

The course will help the students to understand how communication develops, maintains, enhances, and/or destroys family relations. Students will study sex differences in communication; problems of single parenting and dual careers; traditional roles and changing roles within the family; and sex differences in intimacy, power, and decision making. Prerequisite: SCTA 106 or consent of instructor. Colisted as WMST 206.(Sp, alternate years)

#### **WMST 214** Women in Literature

Study, intended for women and men, of the tradition of literature by women and its relationship to movements and periods of the mainstream male-dominated canon. Prerequisites: ENGL 111 and 112. Co-listed as WMST 214. (F or Sp, alternate years)

#### **WMST 220** Gender Issues in Science

This course will examine images of scientists, the history of women in science, current gender issues facing men and women in science and feminist philosophies of science. In order to understand these, the course will attempt to define science, technology and feminism. The course will also address issues of other under-represented groups in science. Prerequisite: sophomore standing or consent of instructor.(alternate years)

#### **WMST 221**

**Global Perspectives on Women** This course covers the social, political, and health status of women across the world and examines the cultural and social structural forces which influence these positions. Topics emphasized are the global exploitation of women and girls, reproductive health and disease, literacy and education, survival sex, rape, infibulation, poverty, war, women in government, work, households, and the military. Co-listed as ANTH/WMST 221. Prerequisite: SOCI 100 or ANTH 100 or WMST 200.

#### **WMST 225** Sex Differences, Gender Roles, and **Sexual Orientation**

This course provides a survey of research concerning the development of psychological, physiological, and behavioral sex differences (and similarities), gender roles, and sexual orientation focusing on how these issues relate to development at the individual, applied (e.g., education and workplace), and cultural levels. (J-Term)

#### **WMST 235** American Autobiography: Varieties of

Personal Narrative (d) This course explores the literary, historical, and psychological structures of various forms of autobiography. Students will explore constant and changing cultural, artistic, and psychological concerns and will investigate, analyze, and appreciate the widely differing purposes of such works. The racial and ethnic diversity

of American autobiography is a major emphasis in the course. Authors to be studied may include Maxine Hong Kingston, Benjamin Franklin, Harriet Jacobs, N. Scott Momaday, Audre Lorde, Mary Rowlandson, Tobias Wolff and Terry Tempest Williams. Prerequisite: English 100. (F or Sp)

#### **WMST 289** 0.5-3 cr. Special Topics in Women's Studies

# 1-3 cr.

**WMST 300** Women and Film

3 cr.

3 cr.

3 cr.

3 cr.

3 cr.

The history of women's cinema, prominent women directors and genres, images of women in film and feminist issues in film. Co-listed as FILM, WMST 300/500. (Sp)

#### **WMST 303** 3 cr.

Women's History: Europe The course traces the history of women in the Western world from the beginnings of civilization to the present. Emphasizing women's positions in classical antiquity, medieval and modern Europe, the course examines shifting structural patterns that shape women's lives and writings, cultural representations of women, and gender relations in western history and societies. Prerequisites: HIST 101 and 102 or consent of instructor. Co-listed as WMST 303. (occasionally)

#### **WMST 305**

3 cr.

3 cr.

Women's History: Global Perspective The course examines histories of women in diverse regions of the globe, focusing on Latin America, Africa, Asia and/or the Middle East. Emphasizing contemporary history (primarily nineteenth and twentieth centuries) and alternating regions, the course examines indigenous cultural patterns shaping women's histories, analyzes the impacts of western and imperialist cultural patterns on nonwestern women, and explores the complex, interdependent relationships between women in producing and consuming nations. Co-listed as WMST 305. (Sp, alternate years)

#### **WMST 314**

#### Women and Politics

In this course students will examine women's political movements, public policies which affect the relative status of women and men, the role of women in electoral politics and how ideas about gender have shaped political life. Our analysis will include examples from politics in the United State and also from other nations. Co-listed as Women's Studies 314.(alternate years)

#### WMST 323

#### Sociology of Family

An examination of the social structure and social interactions in families. Crosscultural comparisons are examined as well as issues pertinent to western family life: mate selection, family life cycle, gender roles, parenting, abuse, and death. SOCI 100 or ANTH 100. Co-listed as WMST 323. (Yearly)

3 cr.

3 cr.

3 cr.

0.5-3 cr.

3 cr.

# WMST 326

Sociology of Gender Roles

This course analyzes the various social, cultural, and social-psychological processes which are related to gender role identity and gender differentiated behavior. The course also explores the relationships between gender stratification and the options and life-chances of men and women in the United States and across the world. Prerequisites: SOCI 100 or ANTH 100. Colisted as WMST 326. (Sp)

# WMST 354

Women and the Law

The course is designed as a survey of many areas of law which have made distinctions between the sexes, including employment, family, reproduction, education and criminal justice. The focus is on legal issues concerning sex discrimination against both women and men. Prerequisite: upper class standing. Co-listed as POLS 354. (F or Sp)

#### WMST 379 2-3 cr. Internship in Women's Studies

Students apply theory, concepts and skills developed in the Women's Studies minor to work projects in profit and non-profit organizations. Prerequisites: Completion of 9 credits in the Women's Studies minor, including WMST 200 and approval of the Women's Studies Coordinator.(F, Sp)

#### WMST 389

**Special Topics in Women's Studies (d)** This course addresses a variety of topics in women's studies. Topics may change with each offering, although some may be repeated. Pssible topics could include anthropology and gender, sexuality in culture, and feminist theory.

#### **WMST 440**

**Gender Communication** 

The emphasis of this course is on similarities and differences in the communicative behaviors of women and men. The class will address such topics as female-male roles and stereotypes; differences in female-male verbal and nonverbal codes; partnership styles and alternatives; specific communication skills aimed at female-male relationships in a variety of settings; and special problem areas in female-male communication. Prerequisite: SCTA 284 or consent of instructor. Co-Listed as WMST 440.(Sp)

#### WMST 443

American Ethnic Women Writers (d) A study of representative American women writers of high literary merit representing Black, Native American, Asian, and Hispanic backgrounds. This course will explore the racial, ethnic, and sexual oppression experienced by women of color in American history as it is expressed in literature. The emphasis will be on twentieth-century literature, with special attention to a basic American literary theme: the search for personal identity. Co-listed as WMST 443/643. Prerequisite: Senior standing and completion of CA requirement. (F, or Sp, alternate years)

#### WMST 480 Seminar: Ethn/Gender

/Gender

An interdisciplinary study of the ways in which human subjectivities are constructed through the categories of gender, race, ethnicity, sexuality and class in American culture. Prerequisite: ETHN 200 or WMST 200 or consent of instructor. (Sp, odd years)

#### WMST 489 0.5-3 cr. Special Topics in Women's Studies

WMST 4991-3 cr.Women's Studies: Directed StudyThis course includes directed studies on awomen's issue, probably in the student'smajor field, to be approved by the Women'sStudies Committee as a whole and tobe supervised by a designated facultymember of the committee in conjunction (ifnecessary) with a selected faculty memberin the field of the study. A final researchpaper in the range of 15-20 pages willresult from the student's directed study.Prerequisites: WMST 200 and seniorstatus.(F,Sp)

WMST 589 0.5-3 cr. Special Topics in Women's Studies

WMST 689 0.5-3 cr. Special Topics in Women's Studies

WMST 789 0.5-3 cr. Special Topics in Women's Studies

3 cr.